United States Court of Appeals

for the Second Circuit

APPENDIX

OCT 16 1975

75-7382

United States Court of Appeals

FOR THE SECOND CIRCUIT

YAWATA IRON & STEEL CO., LTD.,

Plaintiff-Appellant,

—against—

ANTHONY SHIPPING CO., LTD.,

Defendant-Appellee,

JOINT APPENDIX

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Exhibit 1

(Bills of Lading)

BILL OF LADING No. B 2.

Notify: MITSUI & CO. INC.
TOKYO, JAPAN

"LADEN ON BOARD"

Freight prepaid AS PER CHARTER PARTY DATED DECEMBER 19, 1969

Shipped in apparent good order and condition by HUGO NEU CORPORATION
on board the LIBERIAN MOTOR ship ANTONIOS DEMADES
of which N. SARRIS is Master for the present voyage, from the
port of BOSTON, MASS., and bound for the port of JAPANESE PORT (S)
and there to be delivered in like good order and condition unto order of
Shipper or his assignees, a cargo of 9,182.4
tons (2,240 lbs. each) (Nine Thousand One Eighty Two & Four Tenths gross tons)
U. S. STEEL SCRAP

ORIGINAL

Cargo to be discharged at the port of delivery by RECEIVER
at the rate of AS PER CHARTER PARTY DATED DECEMBER 19, 1969

all other terms, exceptions and conditions as per CHARTER PARTY DATED DECEMBER 19, 1969

Weight and quality unknown.

In Witness Whereof, the Master of the said vessel hath affirmed to Three (3) Bills of Lading, both of this tenor and date, one of which being accomplished, the other to stand void.

Dated at BOSTON, MASS. JANUARY 5, , 1970,

MORAN SHIPPING AGENCIES, INC.

AGENTS PER AUTHORITY BY LETTER Master
FROM MASTER OF ANTONIOS DEMADES

Freight Payment,

FOR Master
MORAN SHIPPING AGENCIES, INC.

Form 146—Printed in U.S.A. and sold by UNZ & CO., 24 Beaver St., N.Y. U 16518

SECOND ORIGINAL

NOTIFY: MITSUI & CO. INC.
TOKYO, JAPAN.

BULK CARGO

BILL OF LADING

SHIPPED in apparent good order and condition ---5017.6--- tons of 2240 lbs.

of U.S. Steel Scrap more or less, all on board to be delivered,

by HUGO NEU CORPORATION on board the good ~~Steamship~~ Motorship

called the ANTONIOS DEMADES of Monrovia, Liberia whereof

M. SARRIS is Master for this voyage, at the

port of New York, N.Y. and to be delivered at the port

of Japanese Port (s) or as near thereto as the vessel

can safely get, always afloat, unto Order of Shipper

or Assigns,

on payment of freight and charges as per Charter Party dated New York, December 19, 1969

ALL the terms, exceptions and conditions contained in said charter party are herein incorporated and govern the rights of the parties concerned in this shipment.

IN WITNESS WHEREOF, the Master or Agent of the said Vessel hath signed Three (3) Bills of Lading, all of this tenor and date, drawn as a set consecutively numbered, any one of which being accomplished the others to be void.

Dated at New York this 27th day of December 19 69.

WEIGHT, MEASUREMENT, QUANTITY, QUALITY UNKNOWN.

BERGENSEN MARINE CORPORATION
as Agents,
Harry J. Bergensen
As per Master's written Authority.

CARGO

	X	Tons in No. 1 Hatch
	X	Tons in No. 2 Hatch
	X	Tons in No. 3 Hatch
	X	Tons in No. 4 Hatch
TOTAL	X	Tons in Forward Hold
	X	Tons in No. 5 Hatch
	X	Tons in No. 6 Hatch
	X	Tons in No. 7 Hatch
	X	Tons in No. 8 Hatch
TOTAL	X	Tons in After Holds

TOTAL ---5017.6--Tons.

TIME USED IN LOADING

Days ...XXX... Hours ...XXX...

Received on Account of Freight.
Freight prepaid
as per charterparty.
LADEN ONBOARD.

B/L NO. ...NY-1...

1-2 Copy No.....

These commodities licensed by the United States for ultimate destination Japan. Diversion contrary to U.S. Law prohibited.

J 256a
Exhibit 1

BILL OF LADING No. B 1.

Notify: MITSUI & CO. INC.
TOKYO, JAPAN

"LADEN ON BOARD"

Freight prepaid AS PER CHARTER PARTY DATED DECEMBER 19, 1969

Shipped in apparent good order and condition by HUGO NEU CORPORATION
on board the LIBERIAN MOTOR ship ANTONIOS DEMADES
of which N. SARRIS is Master for the present voyage, from the
port of BOSTON, MASS., and bound for the port of JAPANESE PORT (S)
and there to be delivered in like good order and condition unto order of
Shipper or his assignees, a cargo of 10,961.1
tons (2,240 lbs. each) (Ten Thousand Nine Sixty One & One Tenth gross tons)
PROLERIZED STEEL SCRAP

ORIGINAL

Cargo to be discharged at the port of delivery by RECEIVER
at the rate of AS PER CHARTER PARTY DATED DECEMBER 19, 1969

all other terms, exceptions and conditions as per CHARTER PARTY DATED DECEMBER 19, 1969

Weight and quality unknown.

In Witness Whereof, the Master of the said vessel hath affirmed to Three (3) Bills of Lading, both of this tenor and date, one of which being accomplished, the other to stand void.

Dated at BOSTON, MASS. JANUARY 5, 19

FOR MORAN SHIPPING AGENCIES, INC.
Master

MORAN SHIPPING AGENCIES, INC.

ACTS PER AUTHORITY BY LETTER
FROM MASTER OF ANTONIOS DEMADES

Master

J 257a
Exhibit 1

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

Exhibit 2
(Pretrial Order)

----------X

YAMATA IRON & STEEL CO., LTD.,

Plaintiff,

-against-

ANTHONY SHIPPING CO., LTD.,

Defendant.

PRE-TRIAL ORDER

71 Civ. 456 (TPG)

On July 31, 1974 the parties in this action or their attorneys appeared before the Court at a pre-trial conference pursuant to Rule 16 of the Federal Rules of Civil Procedure, and the following action was taken.

1. The pleadings were agreed to be deemed amended in accordance with the framing of the issues in this action in paragraph 9 of this pre-trial order.

2. The parties agreed that the trial of this action should be based upon this order and upon the pleadings as amended to include the following:

AS AND FOR A THIRD AFFIRMATIVE DEFENSE:

19. The loss of the ANTONIOS DEMADES and of her cargo occurred without the privity or knowledge of defendant and, under the provisions of 46 U.S.C.A. 183, the liability of defendant, if any, is limited to the value of the sunken vessel and her pending freight.

except that the following issues raised by the pleadings are expressly abandoned: None.

2-1

3. (a) The parties stipulated that the following facts are not in dispute in this action (each party reserving the right to object to the materiality of any such stipulated fact and its relevancy to the issues):

X

Exhibit 2

(1) The M.S. ANTONIOS DEMADES was a bulk carrier of Liberian Registry with a length of 628' 2", a breadth of 74' 9", ~~a draft of 35' 8"~~, gross tonnage of 15,977, net tonnage of 10,479, powered aft by a diesel engine of 11,200 BHP, 7 cargo compartments (holds) and one deck.

(2) The M.S. ANTONIOS DEMADES was owned by the Anthony Shipping Co., Ltd. and was chartered on the voyage in question by the Hugo Neu Corporation of New York by a charter dated December 19, 1969 at New York for a voyage from New York and Boston to a Japanese port with a full cargo of iron and/or steel scrap and/or motor blocks and/or non-ferrous scrap excluding turnings.

(3) The vessel, after taking on bunker fuel of 184.04 tons and diesel oil of 60.36 tons in Baltimore, Maryland on December 17, 1969, proceeded to New York to load an estimated 5,017.6 tons of ship scrap steel in holds No. 2, 4 and 6 in exchange for an on-board bill of lading number NY-1 dated December 27, 1969 and signed by the ship's agent as per the Master's written authority.

(4) The vessel, upon completion in New York, proceeded to Boston to load 2,000 tons in hold No. 1, 4,300 tons in hold No. 3, 4,661.1 tons in hold No. 7, for a total of an estimated 10,961.1 tons of prolerized steel scrap in exchange for an on-board bill of lading number B1; and 1,500 tons of ship scrap steel in hold No. 2, 921 tons of ship scrap steel in hold No. 4, 3,700 tons of #1 heavy melting scrap in hold No. 3, 1,761.1 tons of #1 heavy melting scrap in hold No. 4, and 1,300 tons of #1 heavy melting scrap in hold No. 6, for a total of

2-2

Exhibit 2

an estimated 9,182.4 tons of U. S. steel scrap in exchange for an on-board bill of lading number 22; both bills dated January 5, 1970 and signed by the ship's agent as per authority by letter from the Master.

(5) The recipient of all of the above bills of lading was the Hugo Neu Corporation which in turn negotiated them for value to Mitsui & Co. (U.S.A.), Inc., which then delivered the bills to the order of the Fuji Bank Ltd., which in turn delivered the bills to the order of Mitsui & Co., Ltd., which finally endorsed over for value the bills to the Nanta Iron & Steel Co., Ltd., the plaintiff herein.

(6) There was 321 tons of bunker fuel and 40 tons of diesel oil on board upon commencement of the voyage.

(7) The vessel departed Boston for Japan via the Panama Canal. The vessel arrived at Cristobal, C.Z. on January 13, 1970 where it took on 907.5 tons of bunker fuel.

(8) After transiting the Panama Canal, the vessel continued on to Japan, passing the Hawaiian Islands and Midway Island about 60 miles to port, thereafter on a course of 278° True, passing the International Date Line on February 2, 1970.

(9) At about 1400 hours on February 6, 1970 with the Master in command of the vessel, and the 2nd Mate, Gregos Miles, on watch on the bridge with a lookout and a helmsman, the number one hatch cover gave way, which resulted in the flooding of the number one hold.

2-3

Exhibit 2

(10) The Master reversed course to 98° True and sent a party forward to examine the hatch. After examination of the damage, a determination was made that the hold could not be sealed. At about 1700 hours the vessel reversed course again and resumed its original course of 278° True.

(11) By 2300 hours on February 7, 1970, the Master ordered the crew to stand by to abandon ship and had SOS signals sent out. At 0813 the Master ordered the crew to abandon ship in the lifeboats. The Master, Chief Mate and 8 other crew members were lost in the water. Twenty survivors were picked up by the S.S. CHILE MARU. The vessel sank at about 33° 11'N and 158° 08'E.

3. (a) The plaintiff's contentions as to liability and damages are as follows:

(1) The ship was unseaworthy at the inception of the voyage due to:

(a) The overloading of the ship past a safe draft.

(b) The lack of adequate fuel oil bunkers to carry the vessel safely to port.

(c) The replacement of an approved and authorized hatch cover with an unapproved and unauthorized hatch cover of unknown quality.

(d) The lack of watertight integrity between main watertight compartments such as to allow the progressive flooding of the vessel.

(e) The lack of an adequate or seaworthy drainage system to prevent progressive flooding.

2-4

Exhibit 2 (1) The lack of adequate loading manuals or other documents to guide the crew in the proper loading of the vessel.

(2) The surveys performed prior to the loss were not sufficient to establish that the vessel was seaworthy. The National Cargo Bureau did not approve the vessel as seaworthy.

(3) The stormy weather encountered by the vessel was not a peril of the sea as defined by law but rather a storm of the type to be expected on this route at the time of year in question, and vessel was far enough away from the storm center to avoid the worst parts of the storm.

(4) That due to lack of an adequate No. 1 hatch cover and an unsafe draft, the hatch cover collapsed under waves it should have withstood.

(5) That notwithstanding the failure of the hatch cover, the ship should have withstood the filling of No. 1 hatch with water and stayed afloat, but could not because there was not adequate water tightness between main watertight compartments, which was further complicated by the lack of an adequate or seaworthy drainage system sufficient to counteract this flooding. The vessel could not turn and head away from the force of the weather because it lacked sufficient fuel reserves to turn away from land and was filling with water too fast to take a safe course away from land.

(6) The contractual rights between the parties are governed by the Carriage of Goods by Sea Act §1304 (1) which specifically provides that:

2-5

Exhibit 2

"... Whenever loss or damage has resulted from unseaworthiness, the burden of proving the exercise of due diligence shall be on the carrier or other persons claiming exemption under this section."

(7) Plaintiff was the owner of the shipment and the holder for value of the bills of lading at the time of the loss. The value of the 7,438.6 tons of ship scrap, 6,761.4 tons of No. 1 Heavy Melting Steel, and 10,961.1 tons of Prolerized Scrap was $1,700,000.00. The shipment was never delivered to plaintiff.

(8) As to those documents and witnesses requested by plaintiff which defendant has failed to produce, or satisfactorily explain their absence, secondary evidence can be used at the trial or adverse inferences should be drawn from the failure to produce or explain.

3. (c) Defendant's contentions.

Defendant contends that the ship was sturdily built from approved plans and was seaworthy in all respects; that she had undergone an extensive dry-dock and repair period at Osaka, Japan in January 1969, at which time surveyors for the American Bureau of Shipping conducted various inspections; including the completion of special survey No. 1 of her hull, and the annual classification survey; and that she was then found to be in completely seaworthy condition. This finding was reaffirmed by independent surveyors at Vancouver, B.C. in September, 1969.

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Exhibit 2

Between the time of the aforesaid surveys and the voyage herein, the vessel was operated normally, without incident and without incurring damage.

Pursuant to the terms of a Gencon charter party dated December 19, 1969, she was tendered for loading at New York and Boston, where the charterer loaded, stowed, and trimmed a cargo of scrap iron in bulk, after the vessel had first been inspected and passed as satisfactory by the National Cargo Bureau.

The MacGregor type steel hatch covers were secured in place when the vessel sailed from Boston on January 6, 1970. At the time of sailing, due diligence had been exercised to make the vessel seaworthy and she was, in fact, seaworthy in all respects. After bunkering at the Panama Canal, she proceeded toward Japan, but on February 5/6, 1970, she encountered a storm while in the vicinity of 33° North latitude and 157° East longitude. The storm was of such intensity that the pounding seas eventually crushed and sank the ANTONIOS EMBAREK as well as a sister vessel, the CALIFORNIA MARU.

The entire voyage and any contractual rights claimed by plaintiff are governed by a charter party dated December 19, 1969 between the defendant vessel owner herein, and Hugo Neu Corporation. All transportation contracts referred to and incorporated the terms of that charter, which specifically provided that:

> "2. Owners are to be responsible for loss of or damage to the goods or for delay in delivery of the goods only in case the loss, damage or delay has been caused by the improper or negligent stowage of the goods (unless stowage performed by shippers or their

2-7

Exhibit 2

stevedores or servants) or by personal want of due diligence on the part of the Owners or their Manager to make the vessel in all respects seaworthy and to secure that she is properly manned, equipped and supplied or by the personal act or default of the Owners or their Manager.

And the Owners are responsible for no loss or damage or delay arising from any other cause whatsoever, even from the neglect or default of the Captain or crew or some other person employed by the Owners on board or ashore for whose acts they would, but for this clause, be responsible, or from unseaworthiness of the vessel on loading or commencement of the voyage or at any time whatsoever."

The loss of the vessel and her cargo was not caused by personal default or by personal want of due diligence on the part of the defendant vessel owner and there can be no liability herein. In any event liability would be limited under the provisions of 46 U.S.C.A. §183.

Additionally, defendant is entitled by contract to all defenses available under the U. S. Carriage of Goods by Sea Act, and there is no liability under the provisions of that Act.

4. (a) The exhibits which each party now expects to offer at the trial are as follows:

1. Plaintiff's Exhibits:

* 1. Bills of Lading.

2. Invoices.

* 3. Captain's Draft Statement and Stowage Plan.

*4. Two bunker receipts.

* 5. Deposition of Michael Gregos with exhibits.

6. Panama Canal documents (certified by Governor of Panama Canal).

2-8

Exhibit 2

7. National Cargo Bureau documents, exhibits from depositions.

* 8. American Bureau of Shipping documents, exhibits from depositions.

* 9. General Arrangement Plan No. 000,2-1/II 2A.

*10. General Arrangement Plan No. 000,2-1/I 2A.

*11. Capacity Plan No. CM 153.

*12. Hydrostatic Curves No. E 000,2-1/A.

13. Government Weather Data (certified by U. S. Government).

14. Boston Pilots Report/Documents.

15. Sketches of Expert Naval Architect.

16. Pilot Chart of the North Pacific Area (February)

4. (a) 2. Defendant's Exhibits:

* A Bills of Lading.

* B Charter Party.

C Special Hatch Cover Booklet.

* D National Cargo Bureau Certificates.

* E Stowage Plan.

* F Master's Draft Statement.

G Hitachi Repair Bills at Osaka.

* H Three American Bureau Survey Reports at Osaka

I Ship's Plans on file with American Bureau of Shipping.

* J Exhibits identified on all Depositions.

4. (b) Of the documents listed in paragraph 4 (a) hereof, those marked with an asterisk may be received in evidence. All others are deemed marked for identification only.

2-9

Exhibit 2

5. The parties agree that the witnesses whom each party now intends to call, along with the specialty of experts to be called, are those listed below. Should any party hereafter decide to call any additional witnesses, prompt notice of their identity shall be given to each party in writing, setting forth the reason why such witness was not theretofore identified. No witness may be called at trial unless identified as above. The parties further agree that de bene esse depositions may be taken up to 30 days before trial.

Plaintiff's Witnesses

Mike Gregos (Deposition)

National Cargo Bureau (Deposition)

Robert A. Magnuse

John W. Gilbert

A Boston Pilot

Captain Richard O. Patterson

Nikolaos Paravales

An officer/employee of the plaintiff

An officer/employee of Maritime Brokers Inc.

An officer/employee of defendant

Defendant's Witnesses

Mike Gregos (Deposition)

National Cargo Bureau (Deposition)

Tom Nielsen

C. Prapopoleus

Officer of the American Bureau of Shipping

Expert on MacGregor hatch covers

Expert on navigation

T. Morris

R. J. Allinson

A. Omachi

E. Healy

W. Shelak.

2-10

Exhibit 2

6. Stipulation relating to number of expert witnesses. Inapplicable.

7. The following are all of the claims for damages or for other relief asserted by the plaintiff in this action, as of the date of this conference.

Plaintiff claims $1,700,000.00 for loss of its cargo. No counterclaims.

8. The parties also agreed on the following matters:

(a) Plaintiff at this time expects to require 3 trial days; defendant at this time expects to require 2 trial days.

9. The issues to be tried are formulated by the Court (with the consent and agreement of the parties) as follows:

(a) Did the vessel sink from a cause or causes for which defendant would be liable under its contract of carriage?

(b) Is defendant entitled to limit its liability?

Dated: New York, N.Y.
, 1974.

SO ORDERED:

U. S. D. J.

CONSENTED TO:

Attorneys for PLAINTIFF

Attorneys for Defendant

J 269a

Exhibit 4

(Charter Party)

Form 102—Printed and Sold by Uss & Co., Inc., 24 Beaver St., New York 4, N. Y.—

RECOMMENDED

Adopted by the Documentary Committee of the Chamber of Shipping of the United Kingdom

CODE NAME: Gencon.

Issued to come into force for fixtures on and after 15th September 1922

The Documentary Council of The Baltic and White Sea Conference

UNIFORM GENERAL CHARTER

AS REVISED 1922

(only to be used for trades for which no approval form is in force)

GORDON-SHALLEY CORP.
137 EAST 36TH ST.
NEW YORK, N. Y. 10016

New York, N.Y. December 19 19 69

Owners. 1. It is this Day mutually agreed between ANTHONY SHIPPING COMPANY LTD., Owners of the ~~steamer or~~ (Liberian motor-vessel "ANTONIOS DEMADES" (Classed 100A1 or equivalent) of 15977/10479 tons ~~gross~~ net Register and carrying about ..... tons of deadweight cargo,

Position. now .....

and expected ready to load under this Charter about .....

Charterers. and Messrs. HUGO NEU CORPORATION of New York, N.Y. as Charterers.

Ports of loading. That the said vessel shall proceed to New York and/or Boston, in this rotation or so near thereto as she may safely get and lie

Cargo. always afloat, and there load a full and complete cargo ~~(if shipment of deck cargo agreed same to be at Charterers' risk)~~ of IRON AND/OR STEEL SCRAP AND/OR MOTORBLOCKS AND/OR NON-FERROUS SCRAP EXCLUDING TURNINGS

(Charterers to provide all mats and/or wood for dunnage and any separations required, the Owners allowing the use of any dunnage wood on board if required) which the Charterers bind themselves to ship, and being so loaded the vessel shall proceed to

Destination. one or two safe ports Japan Nagasaki/Muroran range, at Charterers' option and rotation; one shift of discharging berths within Kanmon port due to lightening of part cargo necessitated by deeper draft of the vessel free of time and expense to Charterers, other shift per Clause 16; notice of readiness to be tendered at the berth in Yawata provided such berth being available at the time of free pratique; if berth unavailable at time of free pratique, ~~as ordered on signing Bills of Lading~~ or so near thereto as she may safely get and lie always afloat and there deliver the cargo ~~on being paid~~ freight — on ~~delivered~~ quantity — as

Rate of freight. follows LUMPSUM OF THREE HUNDRED THOUSAND DOLLARS ($300,000.00) U.S. Currency, basis one port load one port/discharge. FOUR THOUSAND FIVE HUNDRED DOLLARS ($4,500.00 extra for additional loading or discharging port. Ninety percent (90%) of freight to be prepaid within seven days after surrender of signed Bills of Lading, marked: FREIGHT PREPAID AS PER CHARTER PARTY," discountless and non-returnable, vessel and/or cargo lost or not lost. Balance

4-1

Laytime counts whether in berth or not

to: Maritime Brokers Inc., 1 Whitehall St., New York, N.Y. 10004.

Exhibit 4

Owners' Responsibility Clause.

2. Owners are to be responsible for loss of or damage to the goods or for delay in delivery of the goods only in case the loss, damage or delay has been caused by the improper or negligent stowage of the goods (unless stowage performed by shippers or their stevedores or servants) or by personal want of due diligence on the part of the Owners or their Manager to make the vessel in all respects seaworthy and to secure that she is properly manned, equipped and supplied or by the personal act or default of the Owners or their Manager.

And the Owners are responsible for no loss or damage or delay arising from any other cause whatsoever, even from the neglect or default of the Captain or crew or some other person employed by the Owners on board or ashore for whose acts they would, but for this clause, be responsible, or from unseaworthiness of the vessel on loading or commencement of the voyage or at any time whatsoever.

Damage caused by contact with or leakage, smell or evaporation from other goods or by the inflammable or explosive nature or insufficient package of other goods not to be considered as caused by improper or negligent stowage, even if in fact so caused.

Deviation Clause.

The vessel has liberty to call at any port or ports in any order, for any purpose, sail without pilots, to tow and/or assist vessels in all situations, and also to deviate for the purpose of saving life and/or property.

Payment of Freight.

~~3. The freight to be paid in cash without discount on delivery of the cargo~~ at mean rate of exchange ruling on day or days of payment, the receivers of the cargo being bound to pay freight on account during delivery, if required by Captain or Owners.

~~Cash for vessel's ordinary disbursements at port of loading to be advanced by Charterers if required at highest current rate of exchange, subject to two per cent to cover insurance and other expenses.~~

Loading.

~~5. Cargo to be brought alongside in such a manner as to enable vessel~~ to take the goods with her own tackle and to load the full cargo in ..... running working days. Charterers to procure and pay the necessary men on shore or ~~on board. Pilots to be~~ at work there, vessel only bearing the cargo onboard. ~~If the loading time be by circumstances~~ cargo to be put free in vessel's holds, Owners or by paying liberty money.

~~Any piece arising exchange of terms over or two months shall be loaded, stowed and discharged by Charterers at their risk and expense.~~

~~Time to commence at 1 p.m. if notice of readiness is given before noon and at 6 a.m. next working day if notice given during office hours after noon.~~

The notice to be given to the Shippers, Messrs.....

.....

~~Time lost in waiting for berth to count as loading time.~~

Discharging.

~~6. Cargo to be received by Merchants at their risk and expense alongside~~ the vessel not beyond the reach of her tackle and to be discharged in ..... running working days. Time to commence at 1 p.m. if notice of readiness to discharge is given before noon, and at 6 a.m. next working day if notice given during office hours after noon.

~~Time lost in waiting for berth to count as discharging time.~~

Demurrage, if incurred, to be paid by Charterers

Demurrage.

~~7. Demurrage, if incurred,~~ at the rate of..... per day or pro rata for any part of a day, ~~payable day by day to be allowed Merchants altogether at ports of loading and discharging.~~

TWO THOUSAND DOLLARS ($2000.00)

Lien Clause.

8. Owners shall have a lien on the cargo for freight, dead-freight, demurrage ~~and damage for detention~~. Charterers shall remain responsible for dead-freight and demurrage ~~(not including damages for detention)~~ incurred at port of loading. Charterers shall also remain responsible for freight and demurrage ~~(not including damages for detention)~~ incurred at port of discharge, but only to such extent as the Owners have been unable to obtain payment thereof by exercising the lien on the cargo.

Bills of Lading.

9. The Captain to sign Bills of Lading at such rate of freight as presented without prejudice to this Charterparty, but should the freight by Bills of Lading amount to less than the total chartered freight the difference to be paid to the Captain in cash on signing Bills of Lading.

Strike (Ice) Clause.

10. *Strike Clause, War Clause* and *Ice Clause as below.*

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Exhibit 4

Laydays, if required by the Charterers, not to commence before December 20, 1969.

Cancelling Clause. Should the vessel not be ready to load (whether in berth or not) on or before the Dec. 30, '69 Charterers have the option of cancelling this contract, such option to be declared, if demanded, at least 48 hours before vessel's expected arrival at port of loading. ~~Should the vessel be delayed on account of ice or otherwise, Charterers to be informed as soon as certain proof of the vessel's delay, but not later than 10 days after the day she is stated to be expected ready to load. Charterers are not to exercise the option of cancelling this contract, unless such delay has been agreed upon.~~

General Average. 12. General average to be settled according to York—Antwerp rules, 1950. ~~Proprietors of cargo to pay the cargo's share in the general expenses even if same have been necessitated through neglect or default of the Owners' servants (see clause 2).~~

Indemnity. 13. Indemnity for non-performance of this Charter-party, proved damages, not exceeding estimated amount of Freight.

Agency. 14. ~~In every case the Owner shall appoint his own Broker or Agent both at the port of loading and the port of discharge.~~

Brokerage. 15. 2½ % brokerage on the freight/deadfreight and demurrage/earned is due to GORDON-SHALLEY CORPORATION and others

In case of non execution at least 1/3 of the brokerage on the estimated amount of freight and dead-freight to be paid by the Owners to the Brokers as indemnity for the latter's expenses and work. In case of more voyages the amount of indemnity to be mutually agreed.

GENERAL STRIKE CLAUSE.

Neither Charterers nor Owners shall be responsible for the consequences of any strikes or lock-outs preventing or delaying the fulfilment of any obligations under this contract.

If there is a strike or lock-out affecting the loading of the cargo, or any part of it, when vessel is ready to proceed from her last port or at any time during the voyage to the port or ports of loading or after her arrival there, Captain or Owners may ask Charterers to declare, that they agree to reckon the laydays as if there were no strike or lock-out. Unless Charterers have given such declaration in writing (by telegram, if necessary) within 24 hours, Owners shall have the option of cancelling this contract. If part cargo has already been loaded, Owners must proceed with same, (freight payable on loaded quantity only) having liberty to complete with other cargo on the way for their own account.

If there is a strike or lock-out affecting the discharge of the cargo on or after vessel's arrival at or off port of discharge and same has not been settled within 48 hours, Receivers shall have the option of keeping vessel waiting until such strike or lock-out is at an end against paying half demurrage after expiration of the time provided for discharging, or of ordering the vessel to a safe port where she can safely discharge without risk of being detained by strike or lock-out. Such orders to be given within 48 hours after Captain or Owners have given notice to Charterers of the strike or lock-out affecting the discharge. On delivery of the cargo at such port, all conditions of this charterparty and of the Bill of Lading shall apply and vessel shall receive the same freight as if she had discharged at the original port of destination, except that if the distance of the substituted port exceeds 100 nautical miles, the freight on the cargo delivered at the substituted port to be increased in proportion.

GENERAL WAR CLAUSE.

If the nation under whose flag the vessel sails should be engaged in war and the safe navigation of the vessel should thereby be endangered either party to have the option of cancelling this contract, and if so cancelled, cargo already shipped shall be discharged either at the port of loading or, if the vessel has commenced the voyage, at the nearest safe place at the risk and expense of the Charterers or Cargo-Owners.

If owing to outbreak of hostilities the goods loaded or to be loaded under this contract or part of them become contraband of war whether absolute or conditional or liable to confiscation or detention according to international law or the proclamation of any of the belligerent powers each party to have the option of cancelling this contract as far as such goods are concerned, and contraband goods already loaded to be then discharged either at the port of loading, or if the voyage

4-3

Exhibit 4

has already commenced, at the nearest safe place at the expense of the Cargo-Owners. Owners to have the right to fill up with other goods instead of the contraband.

Should any port where the vessel has to load under this Charter be blockaded the contract to be null and void with regard to the goods to be shipped at such port.

No Bills of Lading to be signed for any blockaded port, and if the port of destination be declared blockaded after Bills of Lading have been signed, Owners shall discharge the cargo either at the port of loading, against payment of the expenses of discharge, if the ship has not sailed thence, or if sailed at any safe port on the way as ordered by Shippers or if no order is given at the nearest safe place against payment of full freight.

GENERAL ICE CLAUSE.

PORT OF LOADING.

a) In the event of the loading port being inaccessible by reason of ice when vessel is ready to proceed from last port or at any time during the voyage or on vessel's arrival or in case frost sets in after vessel's arrival, the Captain for fear of being frozen in is at liberty to leave without cargo, and this Charter shall be null and void.

b) If during loading the Captain, for fear of vessel being frozen in, deems it advisable to leave, he has liberty to do so with what cargo he has on board and to proceed to any other port or ports with option of completing cargo for Owner's benefit for any port or ports including port of discharge. Any part cargo thus loaded under this Charter to be forwarded to destination at vessel's expense but against payment of freight, provided that no extra expenses be thereby caused to the Receivers, freight being paid on quantity delivered (in proportion if lumpsum), all other conditions as per Charter.

c) In case of more than one loading port, and if one or more of the ports are closed by ice, the Captain or Owners to be at liberty either to load the part cargo at the open port and fill up elsewhere for their own account as under section B or to declare the charter null and void unless Charterers agree to load full cargo at the open port.

d) This Ice Clause not to apply in the Spring.

PORT OF DISCHARGE.

a) Should ice (except in the Spring) prevent vessel from reaching port of discharge Receivers shall have the option of keeping vessel waiting until the re-opening of navigation and paying demurrage, or of ordering the vessel to a safe and immediately accessible port where she can safely discharge without risk of detention by ice. Such orders to be given within 48 hours after Captain or Owners have given notice to Charterers of the impossibility of reaching port of destination.

b) If during discharging the Captain for fear of vessel being frozen in deems it advisable to leave, he has liberty to do so with what cargo he has on board and to proceed to the nearest accessible port where she can safely discharge.

c) On delivery of the cargo at such port, all conditions of the Bill of Lading shall apply and vessel shall receive the same freight as if she had discharged at the original port of destination, except that if the distance of the substituted port exceeds 100 nautical miles, the freight on the cargo delivered at the substituted port to be increased in proportion.

Clauses Nos. 16 through 48, both inclusive, as attached hereto, are to be considered fully incorporated in this Charter Party.

By authority from Owners

HUGO NEU CORPORATION

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Form 142—Printed and Sold by Uno & Co., Inc., 24 Beaver St., New York 4, N. Y.—C 30518

Exhibit 4

RIDER TO CHARTER PARTY DATED DECEMBER 19, 1969

MS "ANTONIOS DEMADES"

16. ...Charterers have the privilege of shifting to other berths each port both ends, all shifting expenses to be for Charterers' account, and full time shifting to count as laytime; however, officers' and crew overtime and fuel consumed, to be for Owners' account.

17. Cargo to be loaded, stowed, trimmed and discharged by the Charterers, free of expense to the vessel.

18. Cargo is to be loaded, stowed and discharged within a total of twenty-four (24) weather working days of 24 hours, Sundays and holidays excepted even if used. If longer detained, Charterers to pay demurrage at the rate stipulated in Clause 7, and payments to be made in the same currency as freight payment. If sooner despatched, Owners to pay despatch at the rate of One Thousand ($1,000.00) Dollars per day or pro rata for part of a day on laytime saved both ends, and payments to be made in the same currency as freight payment. Charterers' privilege to deduct brokerage and undisputed despatch from freight.

19. Time from noon Saturday until 8:00 A.M. Monday not to count, even if used. Time from midnight preceding holiday until 8:00 A.M. the day after holiday not to count even if used.

20. At each port, time to count 8:00 A.M. first working day after due notice given, whether vessel in berth or not; notice of readiness to be given in writing within office hours.

21. Understood Charterers have officially declared on fixing New York as first load port. Orders for second loading and/or second discharge port to be given latest while vessel loading or discharging at first port. Orders for discharging port to be given latest when vessel 96 hours off Japan.

22. Vessel to wireless Charterers' agents at loading and discharging ports, giving 96 hours' notice of expected time of arrival; also 48 hours' final notice of arrival to be given to Charterers' agents at loading and discharging ports.

23. It is understood vessel guarantees minimum 25,000 long tons deadweight for cargo, 1,043,051 cu. ft. bale space and 1,109,014 cu. ft. grain space, all clear space excluding wingtanks and deeptanks. Vessel guarantees maximum draft at load port of 35 ft. 9 ins. salt water, and maximum draft on arrival Japan of 35 ft. 6 ins.

24. Vessel has one deck and seven hatches and seven holds; Charterers' privilege to work all hatches at all times; vessel has double winches and double derricks at each hatch.

4-5

Exhibit 4

25. Vessel to tender clear of sweat battens and any obstacles that might be hindering the loading and discharging of scrap including trimming hatch covers and ladders. Tanktops, tunnels, exposed cables and pipes to be entirely and properly protected by the vessel against the hazards normally connected with a scrap cargo. Broken or split boards, cargo battens, dunnage and loose protection on tanktops not to be considered as proper protection. Charterers not to be responsible for damages to sweat battens, hatch covers and trimming hatch covers and any object if stored in such a way that they are exposed to contact with the cargo. Charterers not to be responsible for damages to ladder brackets and batten clips, removable or unremovable. Warranted wooden bulkhead sheathing and landing pads on tanktops to be in good condition.

26. Vessel to furnish a certified cliabration scale for all tanks, including fore and after peak and double bottom tanks and deeptanks. Plimsoll marks amidship and draft marks on port and starboard side, bows and sterns, to be clearly cut and marked on shell plating. Vessel to furnish capacity plan, displacement scale, and deadweight scale and same to be certified by Master, as to the correctness at time of loading.

27. Use of hatch beams and hatch covers between lower holds and tweendecks generally at the discretion of ship's Captain with the exception of such instances where the beams and covers are necessary for cargo separation purposes, and where their use is requested by Charterers/ Shippers. All hatch beams to be individually lined up on decks before arrival at loading port for identification and inspection.

28. Stevedoring overtime to be for account of party ordering same; however, officers' and crew overtime always to be for Owners' account.

29. At loading and discharging ports, wharfage on vessel to be for vessel's account and wharfage on cargo to be for Charterers' account.

30. Charterers' privilege to load and discharge with magnets.

31. Charterers' agents both ends, vessel paying the customary agency fee.

32. Lighterage, if any, either end, to be for Charterers' expense, time counting.

33. Any extra insurance on account of vessel's age, classification, flag or ownership, to be for vessel's account and Charterers may deduct same from freight.

34. At loading and discharging ports, vessel to lie always safely afloat.

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Exhibit 4

35. The stevedores, although appointed by Charterers, shippers or receivers or their agents, to be under the direction and control of the Captain; Charterers, shippers, or receivers shall not be responsible for the acts and defaults of the stevedores at loading and discharging ports. A joint survey to be held prior to loading and after completion of discharging between Owners and stevedores appointed by Charterers, the expenses of which to be shared equally. All claims for damages allegedly caused by stevedores to be settled directly between Owners and stevedores at loading and discharging ports. Master to notify stevedores of damage, if any, in writing within 24 hours after occurrence; otherwise, stevedores not to be held liable.

36. Master to sign statement of fact concerning time used in loading and discharging submitted to him by Charterers' agents, making his reservations if he believes this statement to be incorrect. Master to issue and sign statement that available cargo space has been utilized and stowed to his satisfaction. Master to issue and sign draft statement indicating quantity of cargo onboard.

37. Vessel to give free use of steam and winches at all times and supply light for night work, if required, free of expense to Charterers.

38. Charterers' privilege to sublet this Charter, but original Charterers to remain responsible for its fulfillment.

39. Master is not to take on or pump ballast at loading and discharging ports without obtaining permission of Charterers.

40. Charterers are not required to accept notice of readiness of the vessel at loading port if the ship has more than six feet drag by the stern.

41. It is mutually agreed that should any dispute arise between Owners and the Charterers, the matter in dispute shall be referred to three persons at New York for arbitration, one to be appointed by each of the parties hereto, and the third by the two so chosen. Their decision or that of any two of them shall be final, and for the purpose of enforcing any award, this agreement may be made a rule of the Court. The Arbitrators shall be commercial men, except for the third Arbitrator. Should the two so chosen not be able to agree who the third Arbiter should be, then the New York Produce Exchange is to appoint such third Arbitrator. The third Arbitrator is to be an Admiralty Attorney.

42. Chamber of Shipping War Risks Clauses 1 and 2, New Jason Clause, New Both-to-Blame Collision Clause, P & I Bunkering Clause, and U.S.A. Clause Paramount, as attached hereto, are to be considered fully incorporated in this Charter Party.

43. Owners guarantee that vessel is not intended for breakup upon completion of the engagement entered into under this Charter. Should Owners, contrary to the above guarantee, sell the vessel for breakup

before she has been completely discharged and released by the receivers of the cargo, Owners then to pay whatever insurance penalty might be assessed against Charterers forthwith.

44. If vessel calls at any U.S. port for purposes of loading or discharging cargo, vessel's cargo gear and all other equipment shall comply with Regulations established by U.S. Public Law 85-742 Part 9 (Safety & Health Regulations for Longshoring). If longshoremen are not permitted to work due to failure of the Master and/or Owners and/or Owners' agents to comply with the aforementioned Regulations, any delay resulting therefrom shall be for Owners' account.

45. It is understood that vessel will not drydock prior to reporting on this Charter Party except for force majeure.

46. It is understood Owners will keep vessel on approximately even keel within three feet on completion of discharge.

47. Master is to authorize agent on arrival loading port to sign and issue bills of lading any time Charterers desire for any quantity loaded up to that time.

48. Understood vessel to be left in seaworthy trim while shifting between berths and ports.

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J 277a

Exhibit 4

WAR RISKS CLAUSE

"1. No Bills of Lading to be sign[illegible] for any blockaded port and if the port of discharge be declared blockaded after Bills of Lading have been signed, or if the port to which the ship has been ordered to discharge either on signing Bills of Lading or, thereafter be one to which the ship is or shall be prohibited from going by the Government of the Nation under whose flag the ship sails or by any other Government, the owner shall discharge the cargo at any other port covered by this Charterparty as ordered by the Charterers (provided such other port is not a blockaded or prohibited port as above mentioned) and shall be entitled to freight as if the ship had discharged at the port or ports of discharge to which she was originally ordered.

"2. The ship shall have liberty to comply with any orders or directions as to departure, arrival, routes, ports of call, stoppages, destination, delivery or otherwise howsoever given by the Government of the Nation under whose flag the vessel sails or any department thereof, or any person acting or purporting to act with the authority of such Government or of any department thereof, or by any committee or person having, under the terms of the War Risks Insurance on the ship, the right to give such orders or directions and if by reason of and in compliance with any such orders or directions anything is done or is not done, the same shall not be deemed a deviation, and delivery in accordance with such orders or directions shall be a fulfilment of the contract voyage and the freight shall be payable accordingly."

C.S.U.K., London—26th September, 1935

Form No. 180 Printed and Sold by Unz & Co., New York U 26194

BOTH TO BLAME COLLISION CLAUSE.

If the liability for any collision in which the vessel is involved while performing this [illegible] of Lading falls to be determined in accordance with the laws of the United States of [illegible]erica, the following clause shall apply:—

If the ship comes into collision with another ship as a result of the negligence of the other ship and any act, neglect or default of the master, mariner, pilot or the servants of the Carrier in the navigation or in the management of the ship, the owners of the goods carried hereunder will indemnify the Carrier against all loss or liability to the other or non-carrying ship or her owners in so far as such loss or liability represents loss of, or damage to, or any claim whatsoever of the owners of said goods, paid or payable by the other or non-carrying ship or her owners to the owners of said goods and set off, recouped or recovered by the other or non-carrying ship or her owners as part of their claim against the carrying ship or Carrier.

The foregoing provisions shall also apply where the Owners, Operators or those in charge any ship or ships or objects other than, or in addition to, the colliding ships or objects [illegible] at fault in respect to a collision or contact.

[illegible] Revision—Form 188 Sold by Unz & Co., Inc., 24 Beaver St., N.Y.

NEW JASON CLAUSE: In the event of accident, danger, damage or disaster before or after commencement of the voyage resulting from any cause whatsoever, whether due to negligence or not, for which, or for the consequences of which, the carrier is not responsible, by statute, contract, or otherwise, the goods, shippers, consignees, or owners of the goods shall contribute with the carrier in general average to the payment of any sacrifices, losses, or expenses of a general average nature that may be made or incurred, and shall pay salvage and special charges incurred in respect of the goods.

If a salving ship is owned or operated by the carrier, salvage shall be paid for as fully as if such salving ship or ships belonged to strangers. Such deposit as the carrier or his agents may deem sufficient to cover the estimated contribution of the goods and any salvage and special charges thereon shall, if required, be made by the goods, shippers, consignees or owners of the goods to the carrier before delivery.

NST—March, 1941 Form No. 163—Printed and Sold by Unz & Co., N. Y.- U 37783

U. S. A. CLAUSE PARAMOUNT

This bill of lading shall have effect subject to the provisions of the Carriage of Goods by Sea Act of the United States, approved April 16, 1936, which shall be deemed to be incorporated herein, and nothing herein contained shall be deemed a surrender by the carrier of any of its rights or immunities or an increase of any of its responsibilities or liabilities under said Act. If any term of this bill of lading be repugnant to said Act to any extent, such term shall be void to that extent, but no further.

Form No. 174 Printed and Sold by UNZ & CO., 24 Beaver St., New York—U 10632

PROTECTION & INDEMNITY BUNKERING CLAUSE

The vessel in addition to all other liberties shall have liberty as part of the contract voyage and at any stage thereof to proceed to any port or ports whatsoever whether such ports are on or off the direct and/or customary route or routes to the ports of loading or discharge named in this Charter and there take oil bunkers in any quantity in the discretion of owners even to the full capacity of fuel tanks, deep tanks and any other compartments in which oil can be carried whether such amount is or is not required for the chartered voyage.

January 2nd, 1948 Form 179 Unz & Co., Inc., 24 Beaver St., N. Y. U 63218

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XXX

J 278a

Exhibit 5

(Draft Survey—New York)

MARINE CLAIM SERVICES, INC.

SURVEYING ONE ELEVEN JOHN STREET CONSULTING

NEW YORK, N. Y. 10038

TELEPHONE 962-8810

CABLEGRAMS CLAIMSERVE - NEW YORK

REPORT OF SURVEY

FILE NO. 69MX-281 M DATE January 5, 1970

TO WHOM IT MAY CONCERN
LIGHTSHIP REPORT
M.S. "ANTONIOS DEMADES"

THIS IS TO CERTIFY THAT: the undersigned surveyor did, on December 22 and 29, 1969 attend on board the M.S. "ANTONIOS DEMADES", while berthed afloat alongside North Wet Basin, Kearny, New Jersey and thereafter Prolerized New England Co. Pier, Everett, Mass., in order to ascertain the light and part loaded displacement for the purpose of determining the quantity of scrap steel loaded aboard and has to report as follows.

The vessel was surveyed and calculated in light condition and without cargo aboard on December 22, 1969, and when she completed her part loading at 1700 hours on December 29, 1969.

All bilges and tanks were sounded or gauged, the drafts and freeboards were read and calculations computed in company with the Chief Officer and Chief Engineer.

		LIGHT		PART LOADED	
1a.	Draft Forward	13-07.0		13-06.5	
b.	Draft After Mean	19-08.0		20-03.5	
c.	Draft Mean	16-07.5		16-11.0	
2a.	Draft Midships Port	17-02.0		18-01.0	
b.	DraftMidships Stbd.	16-01.0		16-01.0	
c.	Draft Midships Mean	16-07.5		17-01.0	
3a.	Mean of Means	16-07.5		17-00.0	
b.	Draft Corrected for Hog or Sag	16-07.5		17-00.5	
4.	Displacement	14,660.0	LT	15,060.0	LT
5.	Correction for Trim by Stern	(-) 48.7		(-) 54.4	

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S.S. "ANTONIOS DEMADES" *Exhibit 5* PAGE TWO

6.	Displacement corrected for Trim		14,611.3	LT	15,005.6	LT
7.	Density		1.010		1.024	
8.	Correction for Saltwater	(-)	213.8	(-)	14.6	
9.	Displacement of vessel corrected for Saltwater		14,397.5	LT	14,991.0	LT
10.	Total Liquids	(-)	6,270.3	(-)	1,846.2	
11.	Displacement of vessel corrected for Liquids		8,127.2	LT	13,144.8	LT
12.	Difference in light and part loaded displacement corrected for Consumable Stores, Ballast & Trim.		PART LOADED LIGHT		13,144.8 LT 8,127.2 LT	
13.	Total Cargo loade at Kearny, New Jersey				5,017.6 LT	

	LIGHT	PART LOADED
Fuel Oil	354.3	321.0
Diesel Oil	69.7	55.0
Fresh Water	217.1	169.0
Ballast	5629.2	1301.2
	6270.3	1846.2

SURVEY MADE AND THIS REPORT ISSUED WITHOUT PREJUDICE.

T. A. Nielsen (KC)

T. A. Nielsen
MARINE CLAIM SERVICES, INC.

TAN:kc

This certificate covers the inspection made and calculations computed by the surveyor and represents his best judgement.

Certified correct and approved and issued without prejudice to the rights of whom it may concern.

TOPLIS & HARDING, INC.

By: J. S. Ellis

Vice President

T-2 yolks

New York, New York
January 6, 1970
Reference No. 69-33443-MC3-2 0 0

J 280a

Exhibit 3

(Draft Survey—Boston)

MARINE CHARTS SERVICES, INC.

SURVEYING ONE ELEVEN JOHN STREET CONSULTING

REPORT OF SURVEY

FILE NO. 69NYX-281 N DATE January 6, 1970

TO WHOM IT MAY CONCERN
DISPLACEMENT REPORT
M.S. "ANTONIOS DEMADES"

THIS IS TO CERTIFY THAT: the undersigned surveyor did, on December 29, 1969 and January 5, 1970 attend on board the M.S. "ANTONIOS DEMADES", while berthed afloat alongside Colerized New England Co. Pier, Everett, Mass., in order to ascertain the part loaded and loaded displacement for the purpose of determining the quantity of scrap steel loaded aboard and has to report as follows.

The vessel was surveyed and calculated in part loaded condition with cargo aboard on December 29, 1969 and when she completed her loading at 2235 hours on January 5, 1970.

All bilges and tanks were sounded or gauged, the drafts and freeboards were read and calculations computed in compliance with the Chief Officer and Chief Engineer.

	PART LOADED		LOADED	
1a. Draft Forward	13-06.5		34-07.0	
b. Draft After Mean	20-03.5		35-08.5	
c. Draft Mean	16-11.0		35-01.75	
2a. Draft Midships Port	18-01.0		33-08.0	
b. Draft Midships Stbd.	16-01.0		37-05.0	
c. Draft Midships Mean	17-01.0		35-06.5	
3a. Draft as Above	17-06.5		35-04.12	
b. Draft Interpolated for Hog or Sag	17-06.5		35-05.3	
4. Displacement	15,080.0	LT	33,918.0	LT
5. Correction for Trim Shown	(-) 54.4		(-) NIL	

Exhibit 6

6.	Displacement corrected for Trim	13,035.6	LT		33,918.0	LT
7.	Density	1.024			1.025	
8.	Correction for Saltwater	(-) 14.6		(-)	11.	
9.	Displacement of vessel corrected for Saltwater	14,021.0	LT		33,918.0	LT
10.	Total Liquids	(-) 1,846.2		(-)	579.7	
11.	Displacement of vessel corrected for Liquids	13,144.8	LT		33,338.3	LT
11a.	Estimated ice and snow on deck and in holds			(-)	50.0	
11b.	Corrected displacement				33,288.3	LT
12.	Difference in part loaded and loaded displacement corrected for Consumable Stores, Ballst & Trim	LOADED PART LOADED			33,288.3 LT 13,144.8 LT	
13.	Total Cargo loaded at Boston, Mass.				20,143.5	LT

	PART LOADED	LOADED
Fuel Oil	321.0	321.0
Diesel Oil	55.0	40.0
Fresh Water	269.0	80.0
Ballast	1301.2	138.7
	1846.2	579.7

SURVEY MADE AND THIS REPORT ISSUED WITHOUT PREJUDICE.

T. A. Nielsen
MARINE CLAIM SERVICES, INC.

TAN:mc

This certificate covers the inspection made and calculations computed by the surveyor and represents his best judgement.

Certified correct and approved and issued without prejudice to the rights of whom it may concern.

[redacted]

By
Vice President

6-2

New York, New York
January 6, 1970

Exhibit 7

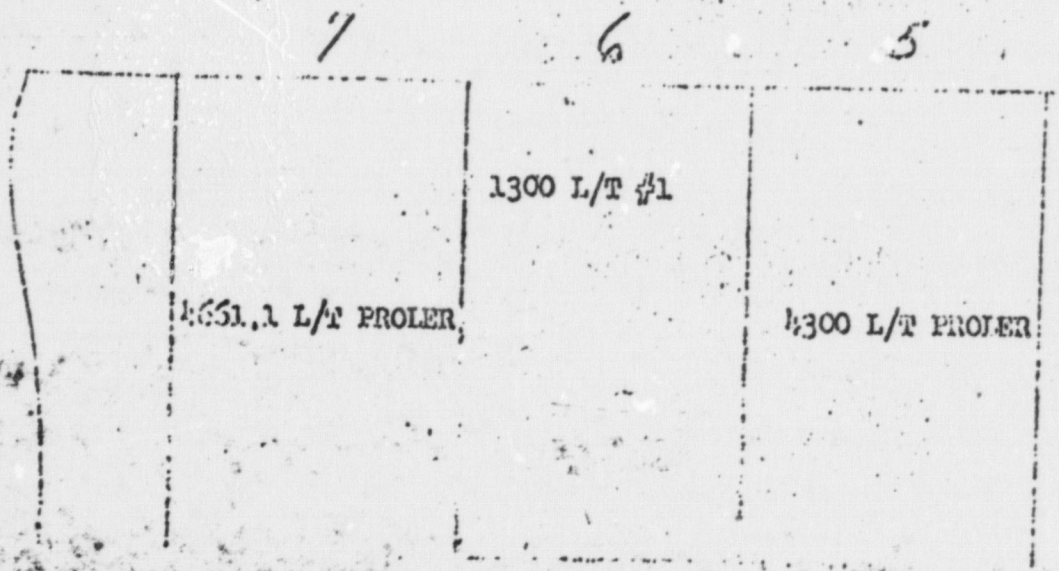
(Stowage Plan)

[PHOTOSTAT]

(Opposite) ☛

S T O

MORAN SHIPPING AGENCIES, INC.
[illegible] DOCK STREET
BOSTON, MASS.



DEMANDED BOSTON FOR JAPAN JANUARY 6, 1970

DEPARTURE DRAFT: FWD 34-07 AFT 35-08.5
BUNKERS BARRING: FUEL OIL 321 L/T
DIESEL 40 L/T

7

EX7

HAGE PLAN

SHIPPER: HUGO NEU CORPORATION

LIBERIAN MS ANTONIOS DEMADES

1	2	2	1
1761.4 L/T #1 921 L/T SHIP SCRAP	3760 L/T #1	1500 L/T SHIP SCRAP	2,000 L/T PROLER

CARGO LADEN:

PROLERIZED STEEL SCRAP	10,961.1 L/T
#1 HEAVY MELTING SCRAP	6,761.4 L/T
SHIP SCRAP	2,421.0 L/T
TOTAL CARGO	20,143.5 L/TONS

Exhibit 8
(Draft Statement)

[PHOTOSTAT]

(Opposite) ☛

Plaintiff's EXHIBIT #8

8

DRAFT SURVEY
...ter-Free Displacement Tonnage

Port of Loading BOSTON, MASS.

Date JANUARY 5, 1970

DECEMBER 19, 1969 AT NEW YORK, N. Y.

...s to the best of my knowledge and belief, ...ey, the situation of the vessel under my ...

		PART LOADED		LOADED
1a.	Draft Forward	13-06.5		34-07.0
b.	Draft After Mean	20-03.5		35-08.5
c.	Draft Mean	16-11.0		35-01.75
2a	Draft Midships Port	18-01.0		33-02.0
b	Draft Midships Stbd.	16-01.0		37-02.0
c	Draft Midships Mean	17-01.0		35-02.0
3a.	Mean of Mean:	17-00.0		35-04.12
b.	Draft corrected for Hog or Sag	17-00.5		35-03.5
4.	Displacement	15060.0		33918.0
5.	Density	1.024		1.025
6a.	Correction for Trim (-)	54.4	(-)	NIL
b.	Displacement corrected for Trim	15005.6		33918.0
7	Correction for Saltwater (-)	14.6	(-)	NIL
8.	Displacement of vessel corrected for Saltwater	14991.0		33918.0
9.	Total Liquids (-)	1846.2	(-	579.7
a.	Displacement of vessel corrected for Liquids	13144.8		33338.3
10.	Estimated ice & snow on deck & in holds		(-)	50.0
11.	Difference in light and loaded displacement corrected for Consumable Stores, Ballast & Trim.		LOADED	33288.3 LT.
			PART LOADED	13144.8 LT.
				20143.5 LT.

TOTAL CARGO ---------- LADEN AT BOSTON, MASS. 20143.5 LONG TONS

...is is satisfactory to me as full and complete cargo under Ch... Party dated DECEMBER 19, 1969 19___.

Cargo was loaded, stored and trimmed to my satisfaction and wit... damage to my vessel.

demurrage has been incurred at loading port.

Surveyor: Tom Nielsen

8

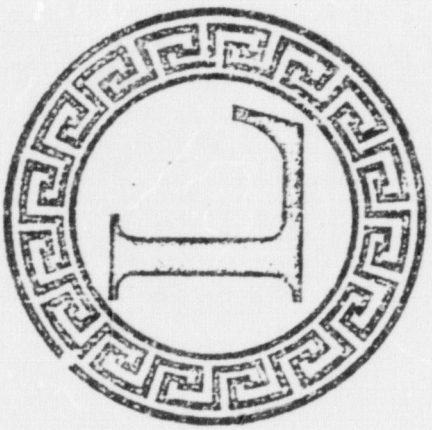
MASTER M/V ANTONIOS DEMADES

3/8/74 H.G.
Plaintiff's Ex. 6 Identified

Exhibit 9

(Nine Bulk Carrier Pamphlet)

(5)



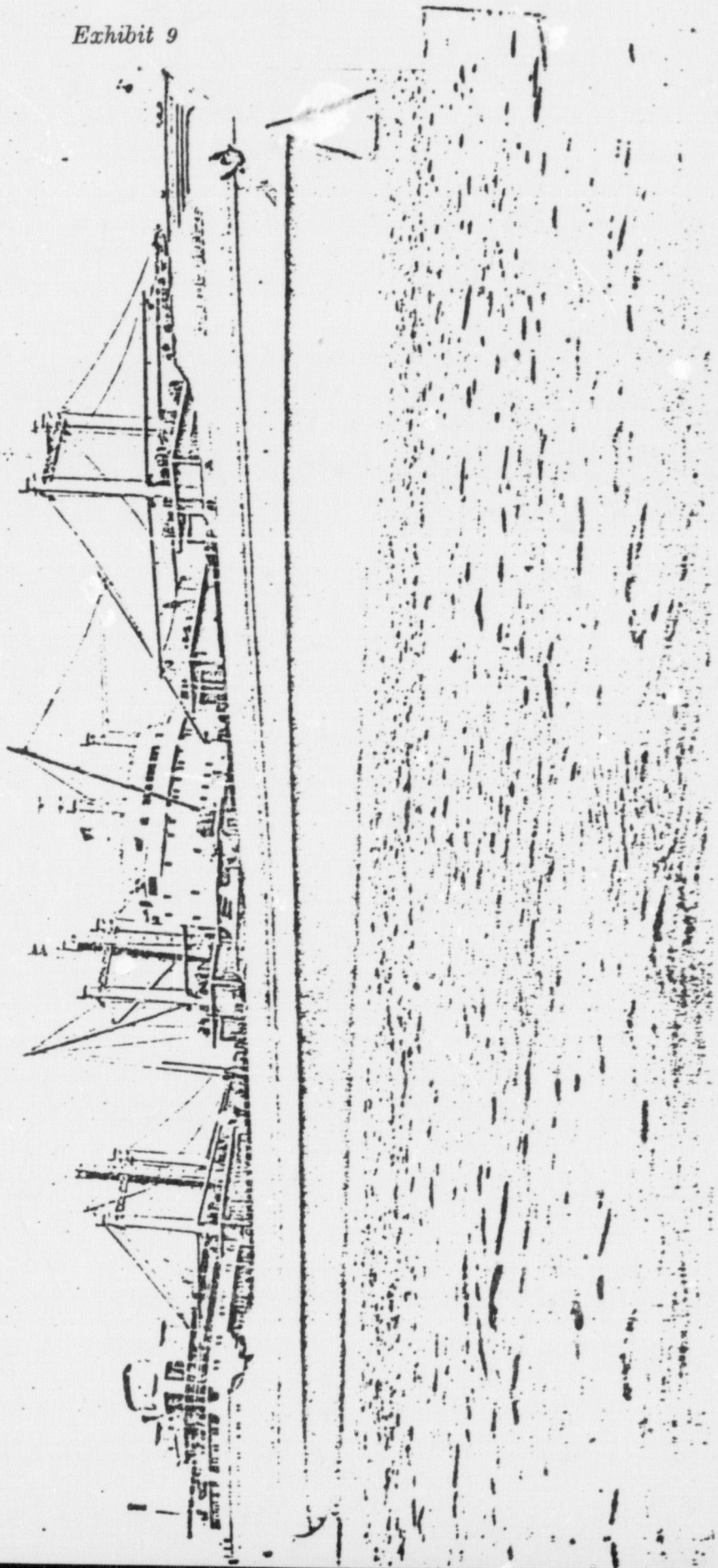
NINE BULKCARRIERS

'Y' TYPE

26,015—26,220 D.W. TONS

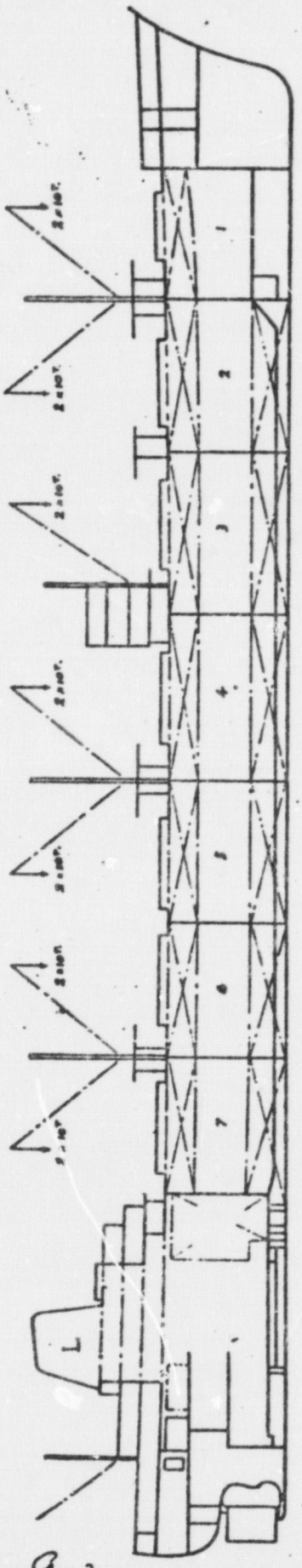
9-1

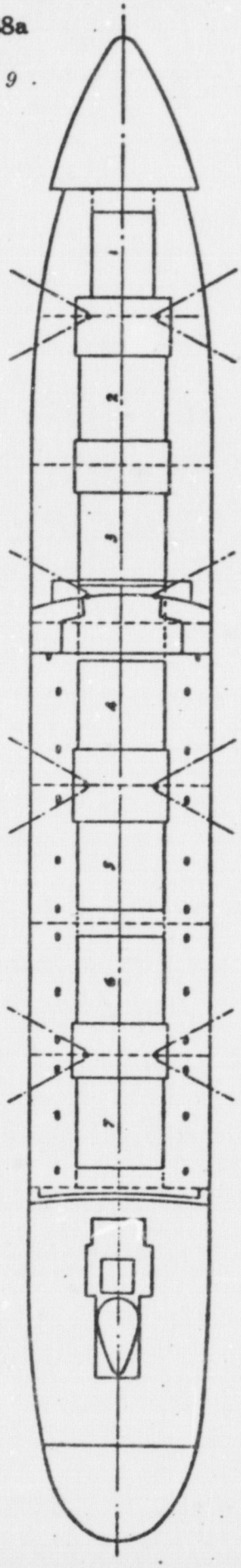
Exhibit 9

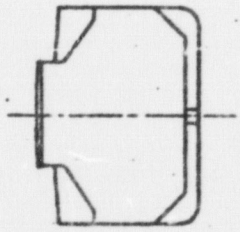


9-2

Exhibit 9







9-3

4-6

Motor Vessels BULK CARRIERS, "P" TYPE

Flags — Liberian or Greek

9 SHIPS of the above named Class:

Hull 182 m/v **THEOFANO LIVANOS**
183 m/v **ARCHANGELOS**
184 m/v **MEANDROS**
185 m/v **EVROS**

HULLS 182/185 Built by Brod. Split, Split, Yugoslavia.

Hull 238 m/v **ATLANTIC BREEZE**
239 m/v **ATLANTIC STAR**
240 m/v **ATLANTIC EAGLE**
241 m/v **ANTONIOS DEMADES**
242 m/v **ATLANTIC CHAMPION**

HULLS 238/242 Built by Uljanik, Pula, Yugoslavia.

Individual Deadweights, Drafts, etc.

Ship	Deadweight	Draft	Built	Machinery—(Main Engines)	
THEOFANO LIVANOS	26,220	35' 7⅛"	4/63	Sulzer 7 RD 76	7 cylinders 10,500 BHP
ARCHANGELOS	26,150	35' 7⅛"	5/63	" " " "	" " " "
MEANDROS	26,160	35' 7⅛"	8/63	" " " "	" " " "
EVROS	26,220	35' 7⅛"	10/63	" " " "	" " " "
ATLANTIC BREEZE	26,015	35' 7⅛"	6/63	Fiat B[illegible] S	8 cylinders 11,000 BHP
ATLANTIC STAR	26,095	35' 7⅛"	8/63	" " " "	" " " "
ATLANTIC EAGLE	26,095	35' 7⅛"	10/63	" " " "	" " " "
ANTONIOS DEMADES	26,135	35' 7⅛"	12/63	" " " "	" " " "
ATLANTIC CHAMPION	26,095	35' 7⅛"	2/64	" " " "	" " " "

J 289a
Exhibit 9

(Yugoslav built) D\W 26,015 TONS — 26,220 TONS

9-5
+++

TYPICAL DETAILS

L.O.A. ..... 628' 1½" (191·50m)
BEAM (extreme) ..... 75' 2⅛" (22·92m)
DEPTH ..... 46' 3" (14·10m)
GROSS TONNAGE (Liberian) 15,985
NET TONNAGE (Liberian) 10,488

CAPACITIES

	Grain Cubic	Bale Cubic
Total Cargo Holds 1 to 7 inclusive	1,109,014	1,043,051
Total Topside Wing Tanks 4, 5, 6, 7	66,916	
Grand Total for Grain	1,175,930	

APPROX. SPEED - CONSUMPTIONS, etc.

SEA — 15 Knots 35 tons HVF, 1½ tons Diesel for Generator.

HARBOUR — Cargo working 3 tons per day Diesel Oil.

BUNKER CAPACITY — 1,500 tons HVF, 155 tons Diesel.

CLASS

American Bureau of Shipping
✠ A1 Ⓔ ✠ AMS

ORE CARGOES

Heavy ore may be loaded in holds 1, 3, 5, 7 leaving holds 2, 4, 6 empty.

HATCHWAYS AND DERRICKS

Hatch No.	Size feet	Size metres
1.	26' 11½" × 26' 2⅛"	(8·220 × 8·000)
2.	35' 11½" × 37' 0½"	(10·970 × 11·300)
3.	36' 8½" × 37' 0½"	(11·200 × 11·300)
4.	36' 8½" × 37' 0½"	(11·200 × 11·300)
5.	36' 8½" × 37' 0½"	(11·200 × 11·300)
6.	36' 8½" × 37' 0½"	(11·200 × 11·300)
7.	36' 8½" × 37' 0½"	(11·200 × 11·300)

WINCHES 14 electric 5/2 tons pulls.

DERRICKS 14 SWL. 10 tons.

RIGS OF DERRICKS

Any 7 derricks may be rigged for 10 tons SWL. (with purchases).

All 14 derricks may be rigged for 5 tons SWL in single whip.

All 14 derricks may be rigged for 5 tons SWL UNION PURCHASE, (Single whips).

At 5 TON Union Purchase, **OUTREACH** is 14·75' (4·5m) and HEADROOM 14·75' (4·5m)

At 3½ TONS Union Purchase, **OUTREACH** is 18' (5·5m) and HEADROOM 19·7' (6m)

ELECTRIC POWER SUPPLY

3 Diesel Generator Sets, each 440KVA (350 KW) 450V 60C

HOLD LENGTHS (Moulded)

No. 1.	51' 7"	(15·75m)
No. 2	62' 2"	(18·96m)
No. 3	65' 7"	(20·00m)
No. 4	68' 3"	(20·80m)
No. 5	57' 9"	(17·60m)
No. 6	55' 1"	(16·80m)
No. 7	55' 1"	(16·80m)

J 290a
Exhibit 9

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Exhibit 10

(General Arrangement Plan—Elevation)

[PHOTOSTAT]

(Opposite) ☛

OVERSIZE FOLDOUT(S) FOUND HERE IN THE PRINTED EDITION OF THIS VOLUME ARE FOUND FOLLOWING THE LAST PAGE OF TEXT IN THIS MICROFICHE EDITION

SEE FOLDOUT NO. 1 (J 293a)

Exhibit 11

(General Arrangement Plan—Plan View)

[PHOTOSTAT]

(Opposite) ☛

OVERSIZE FOLDOUT(S) FOUND HERE IN
THE PRINTED EDITION OF THIS VOLUME
ARE FOUND FOLLOWING THE LAST PAGE
OF TEXT IN THIS MICROFICHE EDITION

SEE FOLDOUT NO. 2 (J 295a)

Exhibit 12

(Capacity Plan)

[PHOTOSTAT]

(Opposite) ☛

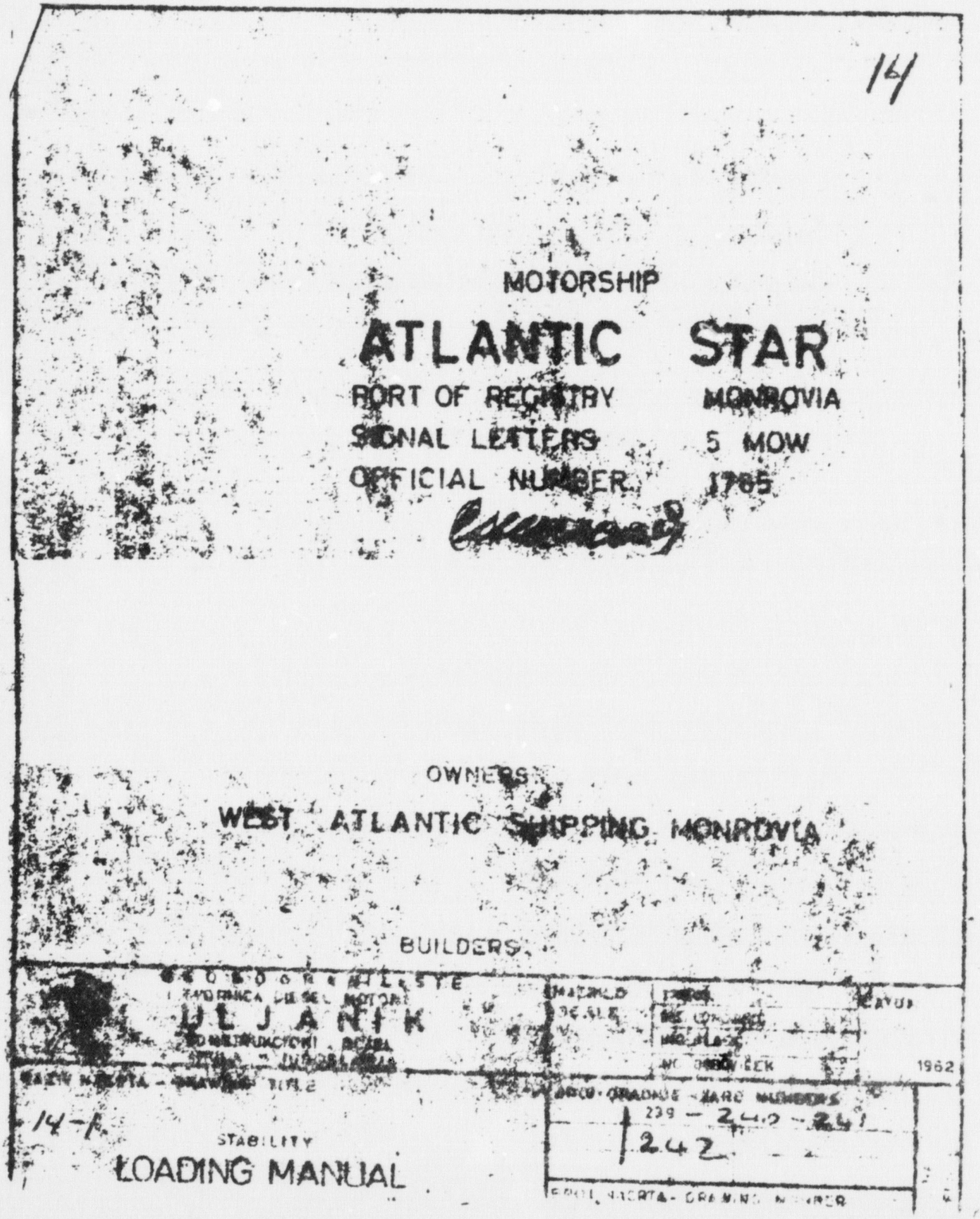
OVERSIZE FOLDOUT(S) FOUND HERE IN
THE PRINTED EDITION OF THIS VOLUME
ARE FOUND FOLLOWING THE LAST PAGE
OF TEXT IN THIS MICROFICHE EDITION

SEE FOLDOUT NO. 3 (J 277a)

J 298a

Exhibit 14

(Loading Manual)



J 299a

Exhibit 14

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LOADING CASES	
LIGHT SHIP	9
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ORE CARGO 16 CUFT/TS AND 50% STORES	14-15
ORE CARGO 32 CUFT/TS AND 100% STORES	16-17
ORE CARGO 32 CUFT/TS AND 50% STORES	18-19
COAL CARGO 40 CUFT/TS AND 100% STORES	20-21
COAL CARGO 40 CUFT/TS AND 50% STORES	22-23
COAL CARGO 44 CUFT/TS AND 100% STORES	24-25
COAL CARGO 44 CUFT/TS AND 50% STORES	26-27
COAL CARGO 48 CUFT/TS AND 100% STORES	28-29
GRAIN CARGO 44 CUFT/TS AND 100% STORES	30-31
GRAIN CARGO 44 CUFT/TS AND 50% STORES	32-33
GRAIN CARGO 48 CUFT/TS AND 100% STORES	34-35
GRAIN CARGO 48 CUFT/TS AND 50% STORES	36-37
GRAIN CARGO 52 CUFT/TS AND 100% STORES	38-39
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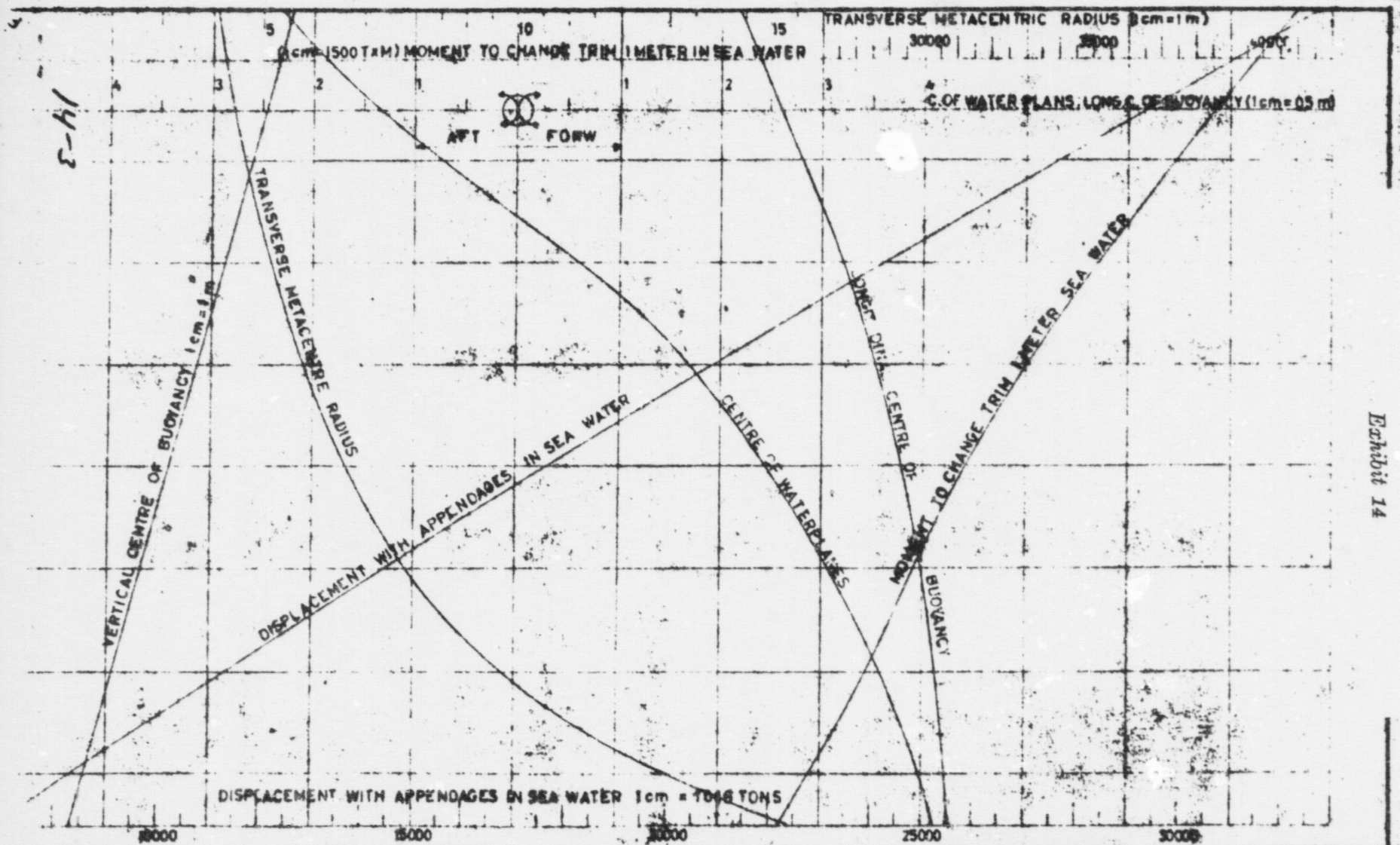
GRAIN CARGO 60 CUFT/TS AND 100% STORES	41-42
GRAIN CARGO 64 CUFT/TS AND 100% STORES	43-44
INSTRUCTIONS FOR USE OF LOADING MANUAL	45
GRAIN LOADING PLAN	93



STABILITY LOADING MANUAL	HYDROSTATIC CURVES	CALCULATED BY CHECKED BY DATE PULA 21 VIII 1963	SHEET 2 TOTAL SHEETS 94 DRAWING N° 0042-2

YARD N° 239 240 241 242

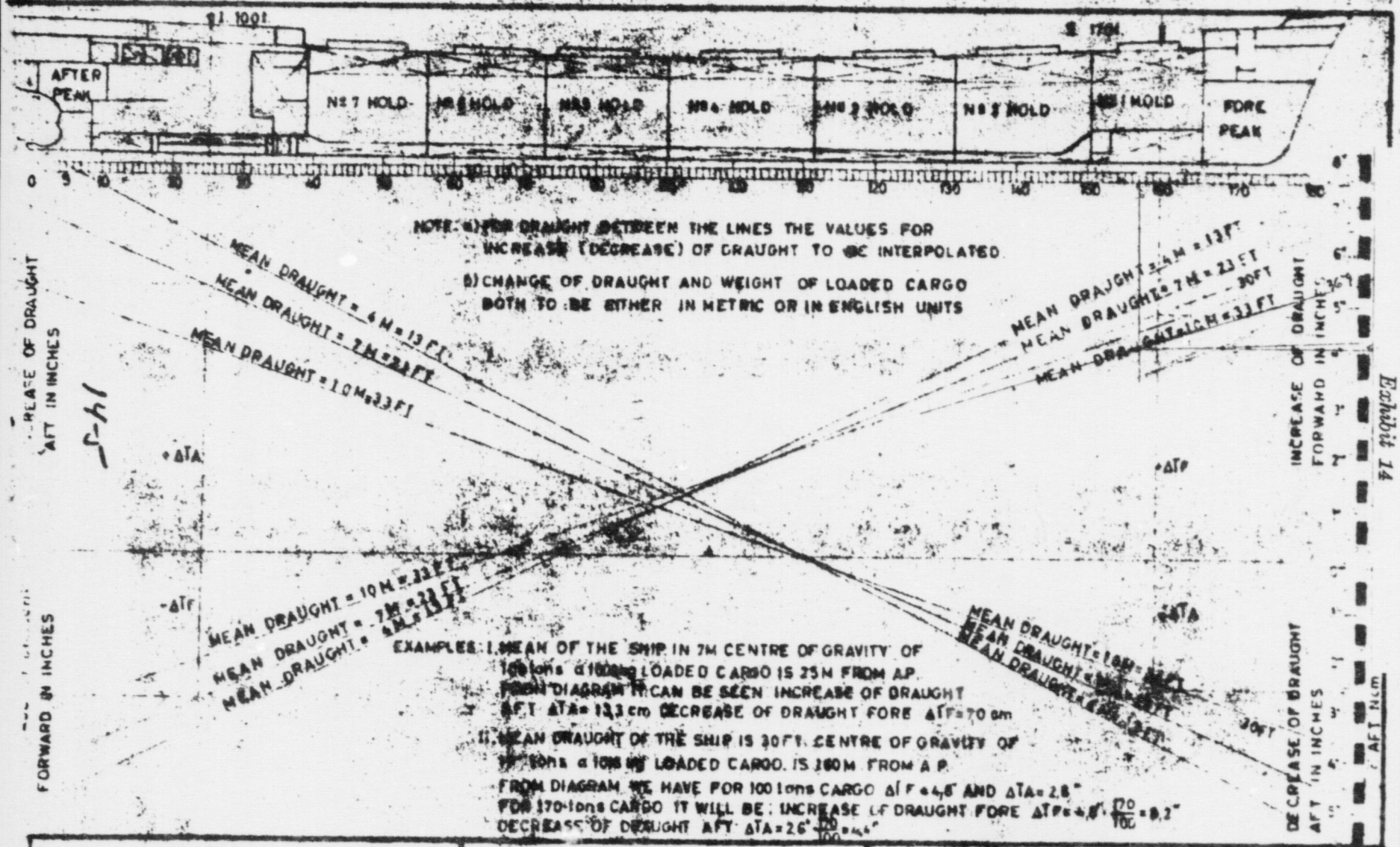
J 300a

Exhibit 14

Exhibit 14

STABILITY
LOADING MANUAL
BODY CURVES
S-CURVES
CALCULATED BY
CHECKED BY
SHEET 3
TOTAL SHEETS 94
YARD Nº 213
DRAWING Nº 004,2-2

Exhibit 14



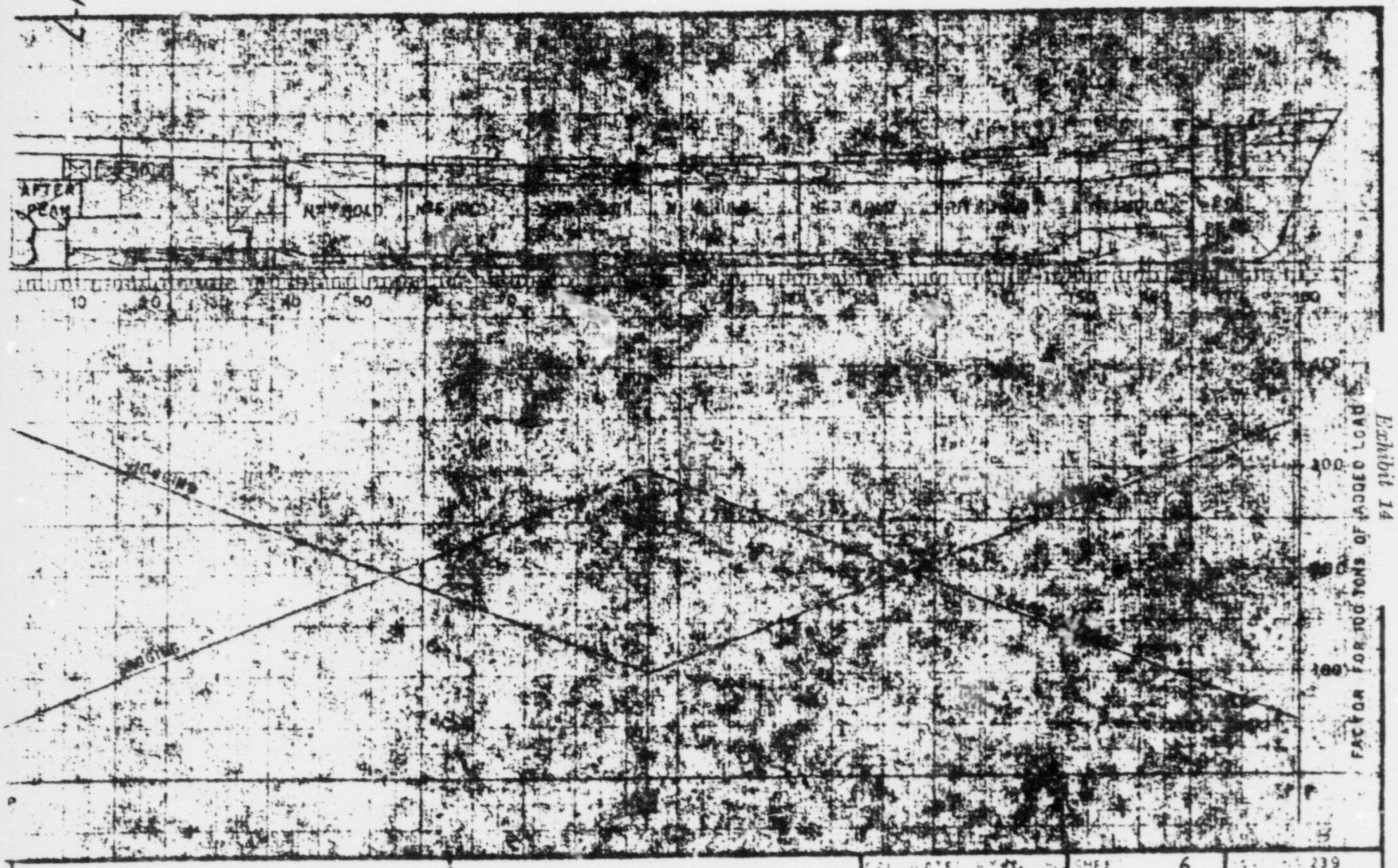
STABILITY LOADING MANUAL	CHANGE OF TRIM FOR 100 TS ADDED WEIGHT	CALCULATED BY CHECKED BY DATE P.L. 21 VIII 1963	SHEET 4 TOTAL SHEETS 14 DRAWING No 004,2-2

Exhibit 14

CHANGE OF TRIM IN INCHES DIPENDING FROM LOADED WATER BALLAST

ITEM	POSITION	WEIGHT TONS	DISTANCE OF CENTRE OF GRAVITY FROM AP	DRAFT MEAN 12 F STERN	DRAFT MEAN 12 F BOW	DRAFT MEAN 21 F STERN	DRAFT MEAN 21 F BOW	DRAFT STERN	DRAFT BOW
FORE PEAK	215 — ∞	735,680	220,22	- 32,37"	+ 47,82"	- 27,29"	+ 44,87"	- 21,55"	+ 38
DB TANK NR1 PS OR SB	192-215	349,900	157,20	- 13,31"	+ 21,61"	- 11,21"	+ 19,46"	- 8,76"	+ 15,5
DB TANK NR2 PS OR SB	167-192	363,140	140,95	- 7,99"	+ 16,05"	- 6,64"	+ 14,53"	- 5,26"	+ 12
DB TANK NR3 PS OR SB	142-167	385,700	120,82	- 2,89"	+ 11,88"	- 2,31"	+ 10,88	- 1,93"	+ 9,94
DB TANK NR4 PS OR SB	116-142	405,380	100,48	+ 3,04"	+ 6,69"	+ 2,51"	+ 6,40"	+ 1,90"	+ 6,04
DB TANK NR5 PS OR SB	94-116	343,010	81,29	+ 7,27"	+ 1,30"	+ 6,28"	+ 1,58"	+ 4,70"	+ 1,4
DB TANK NR6 PS OR SB	73-94	311,460	64,25	+ 10,50"	- 2,49"	+ 8,97"	- 1,77"	+ 6,85"	- 0,47
DB TANK NR7 PS OR SB	52-73	272,550	47,00	+ 12,59"	- 5,45"	+ 10,76"	- 4,36"	+ 8,26"	- 3,2
AFTER PEAK	0-19	380,320	6,69	+ 28,75"	- 16,26"	+ 24,53"	- 15,40"	+ 18,82"	- 11,79
TOP SIDE TANK NR1 PS OR SB	192-215	200,860	15688	- 6,83"	+ 11,09"	- 5,72"	+ 9,96"	- 4,52"	+ 8,04
TOP SIDE TANK NR2 PS OR SB	167-192	312,500	140,45	- 6,72"	+ 13,75"	- 5,62"	+ 12,30"	- 4,44"	+ 11,1
TOP SIDE TANK NR3 PS OR SB	142-167	287,000	121,25	- 2,15"	+ 8,90"	- 1,72"	+ 8,18"	- 1,43"	+ 7,2
TOP SIDE TANK NR4 PS OR SB	116-142	262,700	100,46	+ 1,97"	+ 4,33"	+ 1,71"	+ 4,15"	+ 1,23"	+ 3,9
TOP SIDE TANK NR5 PS OR SB	94-116	221,100	81,28	+ 4,66"	+ 0,84"	+ 4,04"	+ 1,02"	+ 3,03"	+ 1,57
TOP SIDE TANK NR6 PS OR SB	73-94	218,500	63,92	+ 7,45"	- 1,81"	+ 6,42"	- 1,31"	+ 4,87"	- 0,87
TOP SIDE TANK NR7 PS OR SB	52-73	252,600	47,08	+ 11,67"	- 5,06"	+ 9,98"	- 4,04"	+ 7,65"	- 3,3
DRAFT MEAN IN METRES				3962		7010		1005 P	
DISPLACEMENT IN LONG TONS (ø1016kg.				11328		21063		3134P	

14-6



LOADING MANUAL	HOGGING AND SAGGING FACTORS	SHEET 6 / SHEET 94	239 240 241 242
			004,2-2

Exhibit 14

Exhibit 14

SPECIFICATION OF WEIGHTS

N°	DENOMINATION	WEIGHT (1 t/1016 kg) ts	DISTANCE FROM AP m	HORIZONTAL MOMENT mts	HEIGHT ABOVE BL m	VERTICAL MOMENT mts	FREE SURFACE mts
11	CREWS	10,00	43,90	439,00	17,56	175,60	
21	PROVIANT	20,00	6,30	126,00	17,00	340,00	
44	STORES	50,00	132,00	6600,00	17,00	850,00	
31	D.B. FRESH WATER TANK (47 - 49)	11,10	35,68	396,048	1,105	12,265	5,70
32	D.B. FEED WATER TANK (12 - 24)	65,30	13,05	852,165	1,530	99,909	34,00
33	FRESH WATER TANK PS (141-145)	17,07	111,56	1904,329	15,720	268,340	10,00
34	FRESH WATER TANK SB (141-145)	15,48	111,56	1726,949	15,720	243,346	10,00
35	FRESH WATER TANK PS (12 - 18)	96,15	9,67	929,770	13,490	1297,063	260,00
36	FRESH WATER TANK SB (12 - 18)	96,15	9,67	929,770	13,490	1297,063	260,00
37	DRINK WATER TANK PS (8 - 11)	26,74	6,11	163,687	13,830	370,506	39,00
38	DRINK. WATER TANK SB (8 - 11)	26,79	6,11	163,687	13,830	370,506	39,00
41	DB. TANK N° 1 PS (192-215)	353,215	157,20	55525,398	2,63	928,955	460,00
42	DB. TANK N° 1 SB (192-215)	353,215	157,20	55525,398	2,63	928,955	460,00
43	OVERFLOW TANK SB (44 - 49)	25,780	34,55	890,699	1,25	32,225	21,00
44	BOILER OIL TANK SB (26 - 27)	4,640	18,16	84,262	13,35	61,944	1,50
45	SETTLING TANK PS (19 - 26)	47,870	15,51	742,464	13,25	634,277	37,00
46	SETTLING TANK SB (19 - 26)	47,870	15,51	742,464	13,25	634,277	37,00
47	DAILY TANK PS (19 - 23)	28,495	14,06	400,640	13,40	381,833	11,00
48	DAILY TANK SB (19 - 23)	28,495	14,06	400,640	13,40	381,833	11,00
49	BUNKER SIDE TANK PS (42 - 52)	319,063	35,09	11195,921	9,53	3040,670	101,00
410	BUNKER SIDE TANK SB (42 - 52)	319,063	35,09	11195,921	9,53	3040,670	101,00
411	D.B. TANK PS (25 - 49)	65,640	29,86	1960,010	1,53	100,429	72,00
412	D.B. TANK SB (25 - 44)	42,810	27,234	1165,887	1,395	59,720	35,00
413	DAILY TANK FOR ME. SB (30 - 32)	17,530	21,760	381,453	13,383	234,604	16,00
414	SETTLING TANK FOR ME. SB (28 - 30)	16,741	20,160	337,495	13,385	223,810	14,00

14-8

STABILITY CALCULATED BY DRAWING

Exhibit 14

SPECIFICATION OF WEIGHTS

Nº	DENOMINATION	WEIGHT (a 1016 kg)	DISTANCE FROM AP	HORIZONTAL MOMENT	HEIGHT ABOVE BL	VERTICAL MOMENT	FREE SURFACE
		ts	m	mts	m	mts	mts
4,15	TANK FOR AUX. S.B. (26 - 28)	11,661	18,56	216428	13,395	156,199	7,00
5,1	D.B USED OIL TANK (45 - 46)	4,619	33,66	155,475	1,105	51,040	1,80
5,2	D.B. CIR. LUB. OIL TANK (25 - 35)	23,739	20,91	496,382	1,25	29,674	16,20
5,3	D.B. USED OIL TANK (35 - 45)	21,622	29,26	632,660	1,25	27,028	16,20
5,4	RENOVATING TANK PS (34 - 36)	16,501	25,68	423,416	13,43	221,600	16,70
5,5	LUB. OIL TANK FOR M.E. PS (31½-33)	9,551	23,06	220,246	13,515	129,082	6,40
5,6	LUB. OIL TANK FOR M.E. PS (30 - 31½)	9,551	21,86	208,785	13,515	129,082	6,40
5,7	LUB OIL TANK FOR AUX. PS (29 - 30)	6,347	20,86	132,398	13,512	85,761	4,30
5,8	CYL. OIL TANK FOR M.E. PS (28 - 29)	6,347	20,06	127,321	13,512	85,761	4,30
5,9	CYL. OIL TANK FOR M.E. PS (27 - 28)	6,347	19,26	122,243	13,512	85,761	4,30
6,1	FORE PEAK (215 —)	735,68	170,22	125227,45	6,78	4987,91	691,00
6,2	D.BOTTOM T. Nº 1 PS OR SB (192-215)	389,30	157,20	61197,96	2,63	1023,859	460,00
6,3	D.BOTTOM T. Nº 2 PS OR SB (167-192)	363,14	140,95	51184,583	1,54	559,236	1314,00
6,4	D.BOTTOM T. Nº 3 PS OR SB (142-167)	385,70	120,82	46600,274	1,27	489,839	1765,00
6,5	D.BOTTOM T. Nº 4 PS OR SB (116-142)	405,38	100,40	40732,582	1,22	494,564	2019,00
6,6	D.BOTTOM T. Nº 5 PS OR SB (94-116)	343,01	81,29	27883,283	1,22	418,472	1644,00
6,7	D.BOTTOM T. Nº 6 PS OR SB (73 - 94)	311,46	64,25	20011,305	1,30	404,898	1278,00
6,8	D.BOTTOM T. Nº 7 PS OR SB (52 - 73)	272,55	47,00	12809,85	1,44	392,472	688,00
6,9	AFTER PEAK (0 - 16)	380,32	6,035	2295,231	9,86	3749,955	1591,00
6,10	TOP SIDE TANK Nº 1 PS OR SB (192-215)	200,86	156,88	31510,917	14,26	2864,264	220,00
6,11	TOP SIDE TANK Nº 2 PS OR SB (167-192)	312,50	140,45	43890,625	13,49	4215,625	264,00
6,12	TOP SIDE TANK Nº 3 PS OR SB (142-167)	287,00	121,25	34798,750	12,14	3484,180	333,00
6,13	TOP SIDE TANK Nº 4 PS OR SB (116-142)	262,70	100,46	26390,842	12,96	3404,592	346,00
6,14	TOP SIDE TANK Nº 5 PS OR SB (94-116)	222,10	81,26	18047,846	12,96	2878,416	293,00
6,15	TOP SIDE TANK Nº 6 PS OR SB (73 - 94)	218,50	63,92	13966,520	12,99	2838,315	280,00
6,16	TOP SIDE TANK Nº 7 PS OR SB (52 - 73)	252,60	47,08	11892,408	13,21	3336,846	280,00

14-9

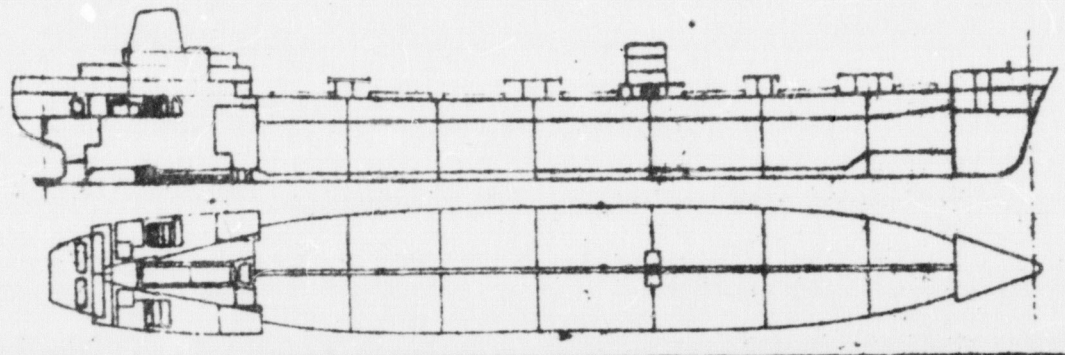
CALCULATED BY [illegible] DRAWING Nº [illegible]

J 307a

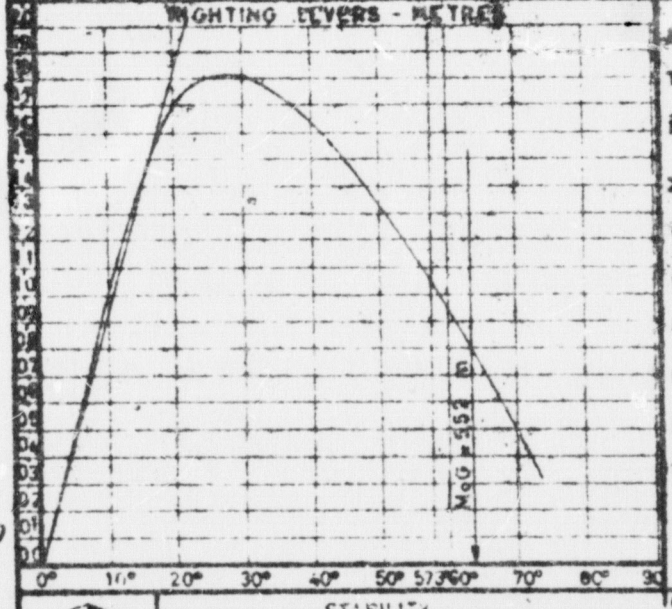
Exhibit 14

LOADING CONDITION | CODE

LIGHT SHIP



GROUP Nº	ITEM	ORD. Nº ITEM FROM THE TABLE OF THE SPECIFICATION OF WEIGHTS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	WEIGHT LONG. TS	DISTANCE FROM AP M	HORIZONTAL MOMENT MTS	HEIGHT ABOVE BL M	VERTICAL MOMENT MTS
1	CREW						
2	PROVIANT AND STORE						
3	FRESH WATER						
4	FUEL OIL						
5	LUBRICATING OIL						
6	WATER BALLAST						
CARGO	HOLD Nº 1	CUFT/TS					
CARGO	HOLD Nº 2	CUFT/TS					
CARGO	HOLD Nº 3	CUFT/TS					
CARGO	HOLD Nº 4	CUFT/TS					
CARGO	HOLD Nº 5	CUFT/TS					
CARGO	HOLD Nº 6	CUFT/TS					
CARGO	HOLD Nº 7	CUFT/TS					
CARGO	TOP SIDE T. Nº	CUFT/TS					
	TOTAL DEADWEIGHT						
	LIGHT SHIP		805 0,00		63128100		7426930
	DISPLACEMENT		8050,00	7842	631281,00	9226	7426930



MEAN DRAUGHT	2,93	M.
	9,61	FT.
TRANSVERSE METACENTRE ABOVE BL	14,75	M.
	48,39	FT.
$\overline{MG}$ VALUE (NOT CORR. FOR FREE SURF.)	5,52	M.
	18,11	FT.
Σ OF MOMENT OF FREE SURF. TANKS (MARK F)		MTS
		FTTS
CORR. OF $\overline{MG}$ FOR FREE SURF. △ $\overline{MG}$		M
		FT
FINAL VALUE OF $\overline{MG}$	5,52	M.
	18,11	FT.
DISTANCE OF C.B. FROM AP	94,08	M.
	308,67	FT.
MOMENT FOR ONE METER TOTAL TRIM	26245	MTS
	86107	FTTS
DISTANCE OF C.G. OF FLOTAT AREA FROM AP	93,86	M.
	307,95	FT.
TOTAL TRIM	4,80	M.
	15,75	FT.
DRAUGHT AFT.	5,44	M.
	17,85	FT.
DRAUGHT FORE	0,64	M.
	2,10	FT.

CALCULATED BY — DRAWING Nº

STABILITY

14-10

J 308a

Exhibit 14

LOADING CONDITION CODE

GENERAL INSTRUCTIONS FOR USE OF LOADING MANUAL

In accordance with paragraph (a) Regulation 19 of Chapter II and sub-paragraph (iii) (a) Regulation 12 of Chapter VI of International Safety of Life at Sea Convention 1960. This loading manual is supplied to the master to enable him immediatelly or by rapid and simple proceeding to obtain accurate guidance how to maintain the ship in good form of stability, strength and safe loading of grain.

Series of different loading conditions are investigated by means of two or three standardised proceedings using special forms for:

1) Stability and Trim data (form A)
2) bending moment by hogging and sagging (form B)
3) angle of list after settling and shiffting of gram surface (form C)

If during the Service appears one loading condition different from any one contained in this manual, the master is in possibility to prepare new informations concerning any of former arguments using proceeding according ateched blank forms.

For that purpose and to facilitate understanding of already worked out loading conditions, the following general explanation is given:

A) STABILITY AND TRIM (use blanc form A)

First step is calculation of displacement and position of centre of gravity for loaded ship using weight and moments to AP of loaded cargo and already calculated weights and moments for stores from the specification of the weights on sheets 7-8.

By means of hydrostatic curves from sheet 2 is to be calculated draught, trim and MG value for given loading condition.

Table and diagram for change of trim are given to facilitate control of trim after changed distribution or quantity of weights on the ship.

B) HOGGING AND SAGGING (use form B)

The hogging and Sagging numerals have to be prepared for checking possible bending stresses caused by given longitudinal weight distribution for the vessel on a wave.

14-11

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STABILITY | CALCULATED BY | DRAWING

Exhibit 14

LOADING CONDITION COOL

GENERAL INSTRUCTIONS FOR USE OF LOADING MANUAL

After entering the weights in form and multiplying by the corresponding factors for hogging and sagging condition two columns of numerals are established. After summation and correction as shown in last lines resultant numerals are established for sagging and hogging conditions.

The numerals should be determined for both hogging and sagging. In the event either numeral exceeds 100 it indicates that the structure is subject to conditions which are more severe than the standard conditions, and are considered unfavorable. In many conditions of operation, especially those less than full and homogeneously loaded, it will be possible to distribute the load in such a manner as to give a value less than 100. For the purpose of operation, particularly in heavy weather, it is desirable to obtain the lowest possible numeral.

c) MOMENT OF LIST AFTER SETTLING AND SHIFTING OF GRAIN (see for c)

In the form are given standard upsetting moments calculated for settling and shifting of grain cargoes in accordance with conditions of paragraph (2) Regulation 13 of SOLAS Convention 1960. The total upsetting moment is to be obtained as the sum of appropriate upsetting moment corresponding to the actual kind of stowing of cargo spaces.

The angle of list is obtained by means of the formula using corresponding values of GM, displacement, and stowage rate of grain. The angle must not exceed 5° at any stage of voyage.

It is recommended to have as many holds as possible full and trimmed full, and if indispensable partly filling to be applied in holds No. 1 and 7 where shifting boards may be fitted.

The general arrangement of spaces and means for grain loading is shown on the here attached grain loading plan.

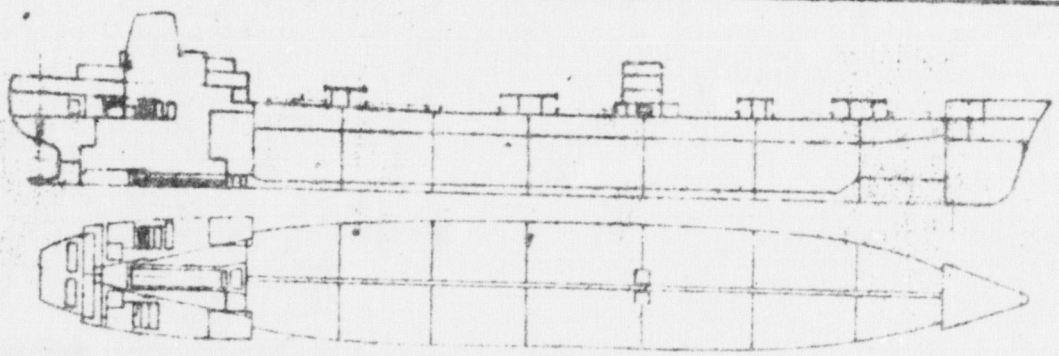
The [illegible] forms are enclosed to the manual.

J 310a

Exhibit 14

LOADING CONDITION

BLANK FORM A



GROUP	ITEM	ORD. N° ITEM FROM THE TABLE OF THE SPECIFICATION OF WEIGHTS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	WEIGHT LONG TS	DISTANCE FROM AP M	HORIZONTAL MOMENT MTS	HEIGHT ABOVE BL M	VERTICAL MOMENT MTS
1	CREW						
2	PROVIANT AND STORE						
3	FRESH WATER						
4	FUEL OIL						
5	LUBRICATING OIL						
6	WATER BALLAST						
21	CARGO HOLD N°1	CUFT/TS					
22	CARGO HOLD N°2	CUFT/TS					
23	CARGO HOLD N°3	CUFT/TS					
24	CARGO HOLD N°4	CUFT/TS					
25	CARGO HOLD N°5	CUFT/TS					
26	CARGO HOLD N°6	CUFT/TS					
27	CARGO HOLD N°7	CUFT/TS					
28	CARGO TOP SIDE T. N°	CUFT/TS					
	TOTAL DEADWEIGHT						
	LIGHT SHIP						
	DISPLACEMENT						

RIGHTING LEVERS - METRES

14-13

0° 10° 20° 30° 40° 50° 57.3° 60° 70° 80° 90°

STABILITY

MEAN DRAUGHT	M	
	FT	
TRANSVERSE METACENTRE ABOVE BL	M	
	FT	
$\overline{MG}$ VALUE (NOT CORR. FOR FREE SURF.)	M	
	FT	
Σ OF MOMENT OF FREE SURF TANKS (MARK F)	MTS	
	FTS	
CORR. OF $\overline{MG}$ FOR FREE SURF. $\triangle$ $\overline{MG}$	M	
	FT	
FINAL VALUE OF $\overline{MG}$	M	
	FT	
DISTANCE OF C.B. FROM AP	M	
	FT	
MOMENT FOR ONE METER TOTAL TRIM	MTS	
	FTS	
DISTANCE OF CG OF FLOTAT. AREA FROM AP	M	
	FT	
TOTAL TRIM	M	
	FT	
DRAUGHT AFT	M	
	FT	
DRAUGHT FORE	M	
	FT	

CALCULATED BY DRAWN

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Exhibit 14

LINE NO.	ITEM	FRAME TO FRAME	WEIGHT TONS	FACTOR	VERTICAL	FACTOR	MOMENT
1	LIGHT SHIP INCL CREW AND STORES						
2	D. B. FRESH WATER TANK	A7					
3	D. B. POTO WATER TANK						
4	FRESH WATER TANK PS/SB						
5	FRESH WATER TANK PS/SB						
6	DRINK WATER TANK PS/SB	8 - 13				0,71	
7	BOILER OIL TANK SB.	26 - 37				1,03	
8	SETTLING TANK PS/SB						
9	DAILY TANK PS/SB	19 - 23		3,08		0,92	
10	BUNKER SIDE TANK PS/SB	42 - 52		4,50		1,60	
11	D B TANK PS	25 - 49		2,64		1,36	
12	D B TANK SB	25 - 44		2,72		1,28	
13	DAILY TANK FOR M E SB	30 - 32		2,87			
14	SETTLING TANK FOR M E SB	28 - 30		2,91		1,09	
15	TANK FOR A/E SB	26 - 28		2,95		1,05	
16	LUB OIL TANK FOR M E PS	31½ - 33		2,83			
17	LUB OIL TANK FOR M E PS	30 - 31½		2,86		1,14	
18	LUB OIL TANK FOR A/E PS	29 - 30		2,89			
19	CYL OIL TANK FOR M E PS	28 - 29		2,91			
20	CYL OIL TANK FOR M E PS	27 - 28		2,94		1,06	
21	FORE PEAK	215 -		3,20			
22	D BOTTOM T N° 1 PS SB	192 - 215		2,85			
23	D BOTTOM T N° 2 PS/SB	167 - 192		2,42		1,58	
24	D BOTTOM T N° 3 PS/SB	142 - 167		1,85			
25	D BOTTOM T N° 4 PS/SB	116 - 142		1,30			
26	D BOTTOM T N° 5 PS SB	94 - 116		0,74			
27	D BOTTOM T N° 6 PS/SB	73 - 88		1,76		2,24	
28	D BOTTOM T N° 7 PS/SB	52 - 73		2,58		1,82	
29	AFTER PEAK	0 - 16		3,29			
30	TOP SIDE TANK N° 1 PS/SB	192 - 215		2,84		1,16	
31	TOP SIDE TANK N° 2 PS/SB	167 - 192		2,39		1,61	
32	TOP SIDE TANK N° 3 PS/SB	142 - 167		1,85			
33	TOP SIDE TANK N° 4 PS/SB	116 - 142		1,30			
34	TOP SIDE TANK N° 5 PS/SB	94 - 116		0,74		2,26	
35	TOP SIDE TANK N° 6 PS/SB	73 - 94		1,72		2,28	
36	TOP SIDE TANK N° 7 PS/SB	52 - 73		2,18		1,82	
37	HOLD N° 1 PS/SB	192 - 215		2,84			
38	HOLD N° 2 PS/SB	167 - 192		2,37		1,63	
39	HOLD N° 3 PS/SB	142 - 167		1,85		2,15	
40	HOLD N° 4 PS/SB	116 - 142		1,30			
41	HOLD N° 5 PS/SB	94 - 116		0,74			
42	HOLD N° 6 PS/SB	73 - 94		1,72			
43	HOLD N° 7 PS/SB	52 - 73		2,18			
44	SUB - TOTALS (Items 2 thru 43)						
45	SUB - TOTALS (Tube) + Line 44)						
46	GEARING CORR. = 2 x Line 45						
47	DISPLACEMENT = Line 45 + Line 46						
48	MOMENTS						

J 312a

Exhibit 14

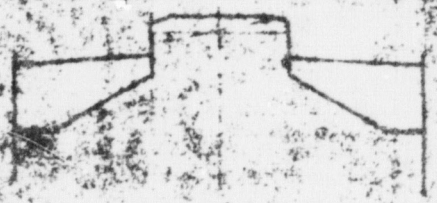
LOADING CONDITION

BLANK FORM C

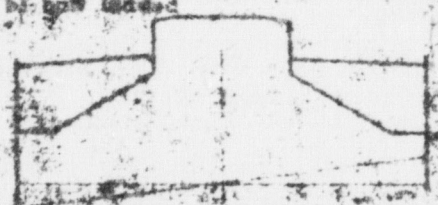
CALCULATION OF ANGLE OF HEEL AFTER SETTLING AND SHIFTING OF GRAIN SURFACE ACCORDING CH. VI REGULATION 9 (II) OF SOLAS CONVENTION 1960

SUPPOSED STANDARD TRIMMING

a) full up

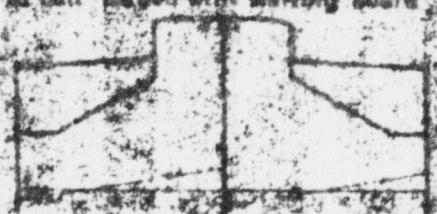


b) half loaded

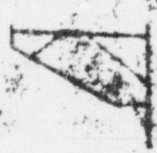


c) half loaded and overstowed

d) half loaded with shifting board



e) gravity filled



When the kind of trimming is not covered by any of standard cases the corresponding upsetting moment in (m⁴) to be calculated as per above Rules

SPACE LOADED		UPSETTING MOMENT standard (m⁴)	UPSETTING MOMENT actual (m⁴)
HOLD No 1	full up	880	
	half loaded	23400	
	half loaded and overstowed	15420	
	half loaded with shifting board	5890	
HOLD No 2	full up	2944	
	half loaded	17320	
	half loaded and overstowed	24840	
HOLD No 3	full up	3013	
	half loaded	42316	
	half loaded and overstowed	27940	
HOLD No 4	full up	3032	
	half loaded	44060	
	half loaded and overstowed	28090	
HOLD No 5	full up	2970	
	half loaded	37220	
	half loaded and overstowed	24820	
HOLD No 6	full up	2961	
	half loaded	36530	
	half loaded and overstowed	23900	
HOLD No 7	full up	2063	
	half loaded	30350	
	half loaded and overstowed	23000	
	half loaded with shifting board	8000	
w.tank 4SB	gravity filled	910	
w.tank 4PS	gravity filled	770	
w.tank 5SB	gravity filled	680	
w.tank 5PS	gravity filled	660	
w.tank 6SB	gravity filled	570	
w.tank 6PS	gravity filled	570	
w.tank 7SB	gravity filled	270	
w.tank 7PS	gravity filled	570	
TOTAL UPSETTING MOMENT		$\sum m$	

ANGLE OF HEEL

$$\varphi^\circ = \frac{20234 \sum m}{\Delta \cdot MG \cdot v} < 5^\circ$$

SHIP AT DEPARTURE	φ	20234 t	
	Δ	x	x
SHIP AT ARRIVAL	φ	20234 t	
	Δ	x	x

Δ - displacement in long tons / MG - metacentric height (m) / v - stowage rate (m³/long ton)

J 313a

Exhibit 14

NOTES TO GRAIN LOADING PLAN

ABSTRACT OF ESSENTIAL RULES

FROM

INTERNATIONAL CONVENTION FOR SAFETY OF LIFE AT SEA, 1960
APPLICABLE FOR SPECIAL SUITABLE VESSELS FOR LOADING OF GRAIN

1. As many holds and compartments as possible shall be trimmed full.

2. The calculated angle of heel must not exceed 5 degrees at any stage of the voyage where:-

   a, In holds or compartments which have been trimmed full the grain surface settles 2% by volume from the original surface and shifts to an angle of 12 degrees with that surface and all boundaries of these holds and compartments which have an inclination of less than 30 degrees to the horizontal; and

   b, In partly filled holds or compartments free grain and bagged cargo will shift as in (a) and overstowed grain surfaces shall form an angle of 5 degrees with the original levelled surface.

3. [illegible], in order to limit the shift of the grain surfaces [illegible] the 5 degrees criterion, either properly constructed longitudinal bulkheads or shifting boards and/or overstowing [illegible] provided.

   The longitudinal divisions shall extend from the bottom of the hold to a height of not less than 2 ft. above the free grain surface.

   The overstowing, consisting of bagged grain or other suitable cargo properly stowed, shall extend to a height of not less than [illegible] above the free grain surface where the width of the hold does not exceed 60% of the moulded beam of the ship and not less than 8 ft. elsewhere.

4. Where practicable, partly filled holds should be trimmed level.

5. Masters are to be guided in arranging the loading of the ship by the grain cargo conditions in the associated stability booklet

6. For any condition departing from those given in the stability booklet the stability criterion stipulated in paragraph 2 must be achieved, and due regard given to the contents of paragraph 1

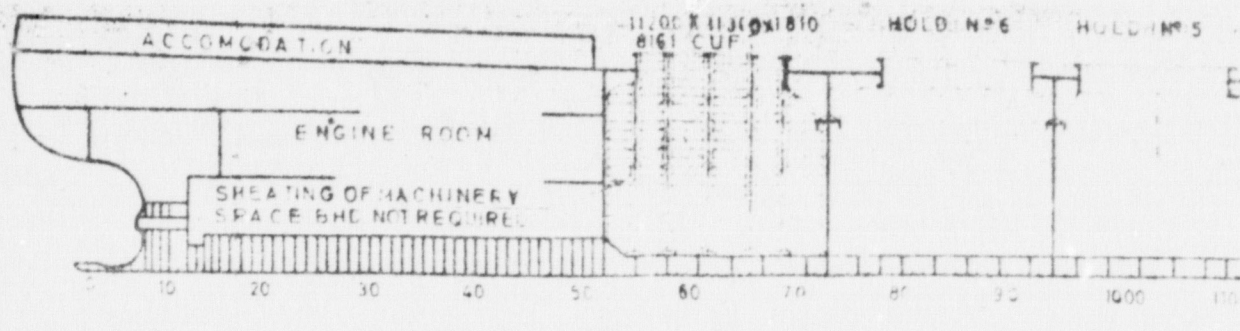
11-11

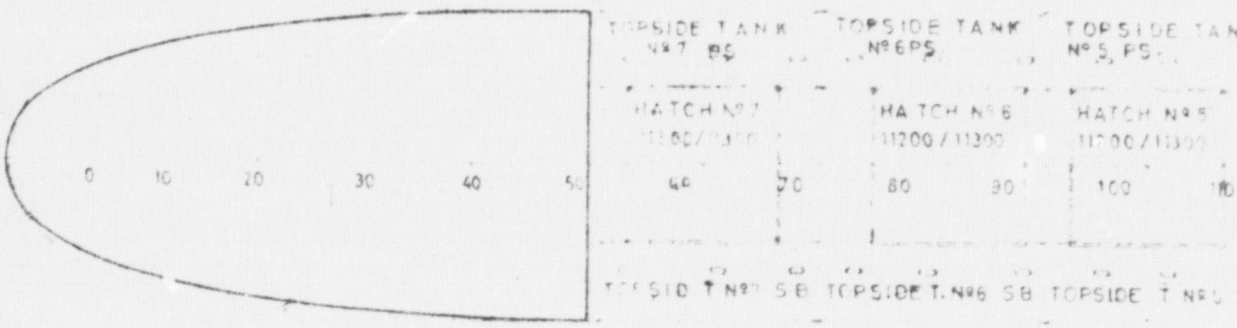
Exhibit 14

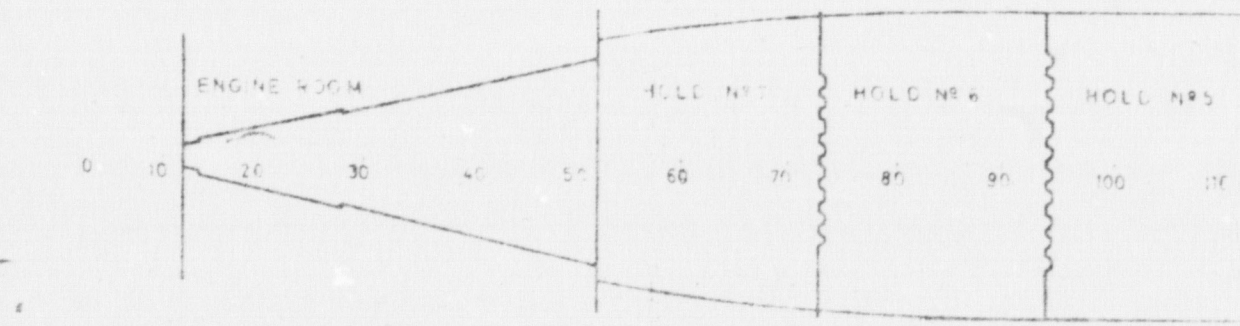
Exhibit 14 (continued)

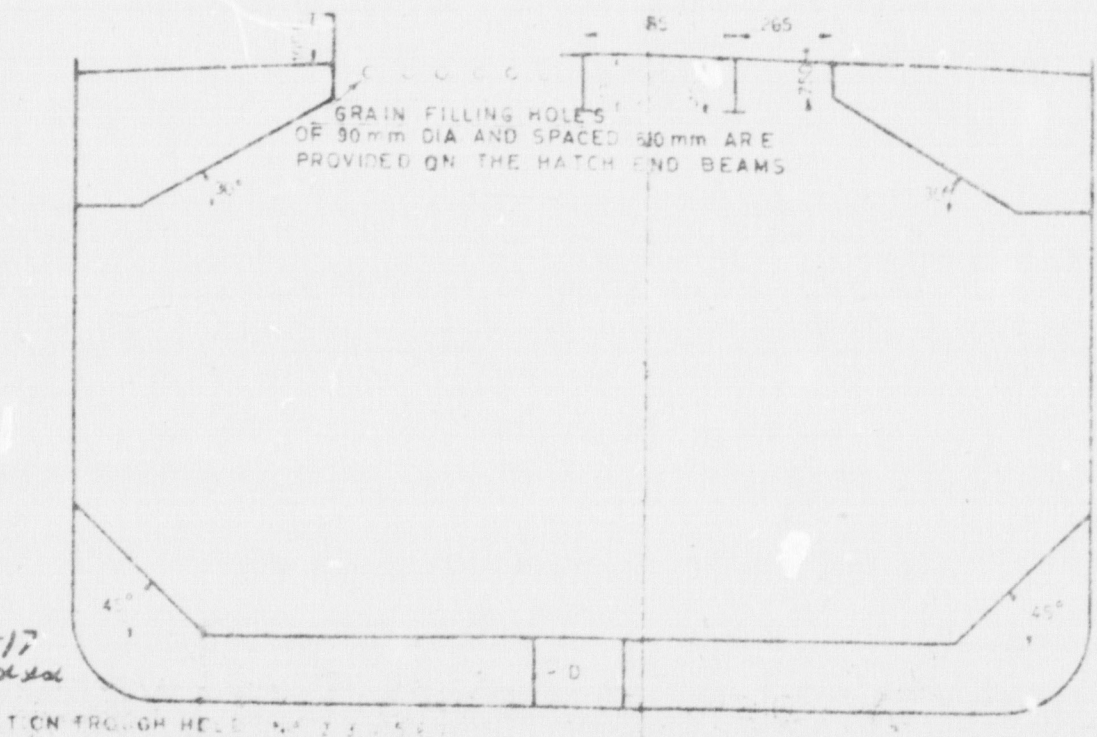
PLAN

[For the convenience of the Court this Exhibit appears on the following page.]





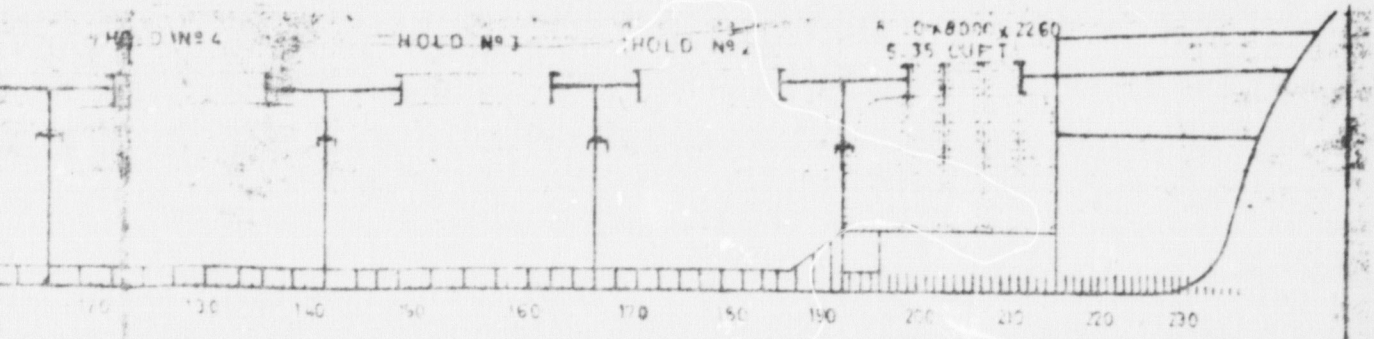


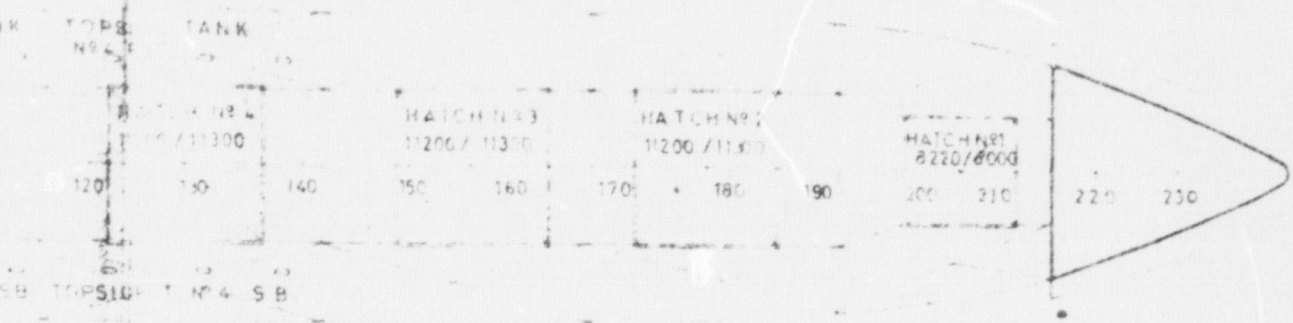


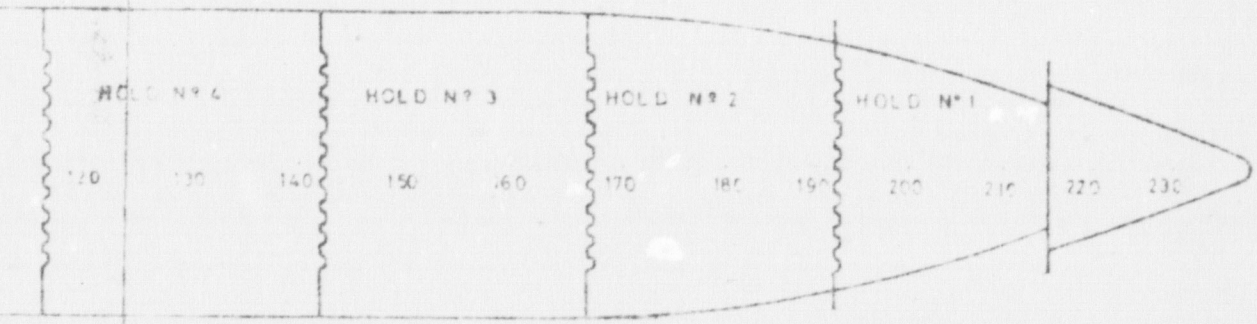
14-17
as see

SECTION THROUGH HE... Nº 2 ... 5

97







MARY OF GRAIN CAPACITIES

	HOLDS	WING TANKS *	
		P	S
		6.435	6.435
		5.440	5.440
		5.323	5.323
		4.158	4.158

* WING TANKS
SUITABLE FOR GRAVITY FILLING

GRAIN LOADING PLAN

M/S „ATLANTIC STAR"

PORT OF REGISTRY MONROVIA

SIGNAL LETTERS ELMQV

OWNERS

WEST ATLANTIC SHIPPING
MONROVIA

GROSS TONNAGE 15984.58 M³

NET TONNAGE 11485.00 M³

THE SHIP IS RECOGNISED AS SPECIALLY SUITABLE FOR LOADING OF GRAIN IN ACCORDANCE WITH REGULATION 12 OF CHAPTER VI OF SOLAS 1960

STABILITY
LOADING MANUAL

DRAWING Nº 0042-2

Exhibit 14

Exhibit 23 (Excerpts)

(Deposition of Akira Omachi)

IT IS HEREBY STIPULATED AND AGREED, by and between parties hereto, through their respective counsel, that the signing and filing of the Deposition is waived and it is further stipulated that all objections are reserved for the trial except as to the form of the question.

AKIRA OMACHI, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. ALLEN:

Q Mr. Omachi, will you tell us where you live?

A I am living in Singapore.

Q Do you have an address there?

A 21F Newton Tower, Evelyn Road, Singapore 11.

Q What is your occupation?

A Ship surveyor.

Q Whom are you employed by?

A American Bureau of Shipping.

Q What are your present duties?

A Ship surveyor, stationed at Singapore.

Q How long have you been with the American Bureau?

A I joined the Bureau in 1956.

Q Do you have any professional training for the work that you do?

A I graduated from the university, called in the States

23-1

Exhibit 23

Kings Point, similar in Japan.

Q Did you spend any time at sea?

A After graduating from school I join shipyard and spend about eight years.

Q And you spent all the rest of your time doing survey work?

A Yes, that is right.

Q Did you, on behalf of the American Bureau, inspect or survey the "Antonios Demades" at Kobe in December of 1968 and January of 1969?

A Yes.

Q Were you stationed in Kobe at that time?

A Yes, I belonged to the Kobe office of the American Bureau of Shipping.

Q Was that ship classed with American Bureau at that time?

A Yes.

Q Would you tell me where you saw this ship?

A I inspected that vessel in Hitachi Sosen Shipyard in Osaka.

Q Was the ship drydocked at that time?

A Yes.

Q About how long did she stay in drydock?

A Around one month.

Q Were repairs made at that time?

A Some bottom damage and also some heavy weather damage

23-2

Exhibit 23

and also routine drydocking and routine surveying.

Q Did you personally supervise all that repair work?

A Yes.

Q And did you also personally survey for classification?

A Yes.

Q You did this yourself?

A Yes, myself.

Q Approximately how many days did you examine or go on board that ship?

A During the timethat ship was staying in the shipyard, I surveyed. I stay there every day half day, because I had other jobs at that time.

Q But approximately how many days was this ship in this yard?

A About one month.

Q And you think you got there practically every day?

A Yes.

Q In the course of your survey work, what parts of the ship did you examine?

A Power machinery.

Q Did you go into the cargo hold?

A Yes.

Q And did you inspect the hull on the outside in the drydock?

A Yes.

Q You also did machinery survey?

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4299 CANADA WAY
BURNABY 2, B.C.

Exhibit 23

A Yes.
Q Did you make reports of what you found?
A Yes.
Q And did these reports also state what work and repairs were accomplished?
A yes.
Q I show you four copies of reports and ask you are they all your reports? Are they copies of your reports?
A I think so.
Q I will ask that they be marked for identification. The report KO-3331 will be Exhibit A.
(REPORT 3331 MARKED EXHIBIT "A" FOR IDENTIFICATION).
Q Report KO-3332 will be Exhibit "B".
(REPORT KO-3332 MARKED EXHIBIT "B" FOR IDENTIFICATION).
Q Report KO-3333 will be Exhibit "C".
(REPORT KO-3333 MARKED EXHIBIT "C" FOR IDENTIFICATION).
Q Report KO-3334 will be Exhibit "D".
(REPORT KO-3334 MARKED EXHIBIT "D" FOR IDENTIFICATION).
Q Is it a regular part of the work of the American Bureau to make reports such as these exhibits that have just been marked?
A Yes.
Q And is this done in the regular course of your work as a surveyor?
A Yes.
Q Looking at Exhibit "A", which is number 3331, and

23-4

Exhibit 23

maybe you have a copy there you can look at too, what did that report cover?

A This is heavy weather damage.

Q And does that show all the damage you found resulting from that heavy weather incident?

A Yes.

Q And on the right hand side, certain repairs are recommended?

A Yes.

Q Can you tell me whether those repairs were all accomplished?

A Yes they were accomplished, because at the end of this report I say, "All above recommendations were carried out at this time, examined and found satisfactory".

Q And you saw that yourself?

A Yes.

Q Now would you look at Exhibit "B", which is 3332. What does that survey cover?

A This is grounding damage survey.

Q And once again, did you personally see that all the recommended repairs were performed that are listed on that exhibit?

A Yes.

Q And you so certified at the end of your report?

A Yes.

Q Now look at Exhibit "C", which is 3333. What does that

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Exhibit 23

report cover?

A This is routine drydocking and routine classification survey report.

Q Would you tell me what you mean by a routine drydocking?

A According to A.B.S. rules and requirements, vessels should be drydocked in certain periods and also part of the machinery should be examined in certain periods.

Q Were all these examinations made in accordance with the Bureau rules?

A Yes.

Q And is that what this report certifies to?

A Yes.

Q What do you mean by Special Survey Number One?

A Vessel and hull construction should be examined after the four years the vessel was built, this we call Special Survey Number One.

Q This is a Special Survey Number One after the vessel was built, is that it?

A Yes.

Q And then the Special Survey Number Two comes four years later?

A Yes.

Q And what is the Annual Classification Survey?

A This is a general inspection which should be carried out every year.

Q And was that done at this time?

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Exhibit 23

A Yes.
Q What were you inspecting for?
A General condition of the hull.
Q And when you make that inspection, are you looking for the present condition or are you looking ahead for the year to follow?
A On the present condition.
Q Don't you look for a condition that would carry the ship through another year?
A Of course that is included, but after a ship sails, nobody expects what happens on that vessel.
Q Did you see all the work performed that is recorded in Exhibit "C"?
A Yes.
Q Would you look at Item 11, which refers to testing of tanks. Can you tell me where those tanks were located on the ship?
A Just underneath of upper deck on the port and starboard side. This is hanging from the upper deck.
Q These tanks are in each hold?
A Yes, on each hold.
Q What did you inspect with respect to Item 12?
A This is a general inspection of the ventilator, hatch combing covers and also condition and also the closing appliances.
Q Is that with respect to making them watertight?

23-7

Exhibit 23

A Yes.
Q Is item 13 the same thing with respect to those items mentioned there?
A Yes, the same thing.
Q What is Item 18 referring to?
A This is about load line inspection. It is annual survey.
Q Tell me in a little more detail, what is a load line survey?
A This is a survey for closing appliances; for vessel construction.
Q When you say closing appliances, just specifically what do you mean?
A Hatch cover; cover for air vent pipe and also ventilator and water tight doors and like this.
Q Are these all the openings where water could get inside the ship?
A Yes.
Q And you inspected them all at that time?
A Yes.
Q And did you find them all to be well made and properly positioned so that they could be tightly closed if necessary?
A Yes.
Q And is there a special certificate you put out with respect to that?

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Exhibit 23

A Yes.

Q And is that Exhibit "D"?

A Yes, KO-3334.

Q Yes, that is what we marked as Exhibit "D". Can you tell me what these four documents are?

A I think this is confirmation from the repair yard.

Q Can we call them repair bills?

A Yes.

Q May they be marked for identification? There is four of them. Perhaps we can mark them E-1, E-2, E-3 and E-4?

(REPAIR BILLS MARKED EXHIBITS E-1, E-2, E-3, and E-4 FOR IDENTIFICATION).

Q Did you inspect all these repairs that are listed on this bill?

A I think so.

Q Would you look at Item 9 on Exhibit E-2 and tell me what that repair was?

A This is about hatch cover repair.

Q Just exactly what was done to the hatch covers?

A Some hatch cover panels were brought to the shop and faired and refitted and also small repairs were done.

Q Then after that work was done in the shop what was done with the hatch covers?

A Then they were tested and tried for tightness.

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Exhibit 23

Q Were they brought back to the ship?
A Yes.
Q And were they installed?
A Yes.
Q And then did you supervise some testing to see if they fit properly?
A Yes.
Q And after all that testing was there a hose test too?
A Yes.
Q And as a result of all that testing, were you satisfied they were in good seaworthy condition?
A Yes.
Q And that is why you approved the ship remaining in class?
A Yes, that is right.
Q Were these hatch covers the same covers that came off the ship? They weren't replaced were they?
A No.
Q And in your opinion were they in good, sound condition when they were reinstalled?
A Yes.
Q In your inspection did you look at the bulkheads between the cargo holds?
A Yes.
Q Was there any condition of damage or deterioration which is not listed in your survey report?

23-10

Exhibit 23

A I saw the small indentations like this, but those I consider not affecting seaworthiness.

Q In other words, you saw some small indentations that in your opinion did not affect seaworthiness?

A Yes.

Q And those are not listed?

A Yes.

Q But anthing larger in the way of indentations or deterioration that would have affected the seaworthiness, you would have listed in your report, is that correct?

A Yes.

Q In Exhibit "C", you refer to Report Number KO-3330. Do you have a copy of that report with you?

A No.

Q Can you tell us what it refers to?

A I remember that report for contact damage for pier.

Q That would be--

A Damage for side shell plating.

Q Whatever it was, was it repaired to your satisfaction?

A Yes.

Q And as a result of your examination of the ship during approximately one month and the supervision of all the repairs, did you recommend to the American Bureau with respect to this ship?

A Yes.

Q What did you recommend?

23-11

Exhibit 23

A I recommended this ship be retained as classed with this Bureau.

Q And how was it classed at that time, do you know?

A Yes, I think so.

Q Was there a designation?

A Maltese Cross A-1(e).

MR. ALLEN: Let the record show that we don't have a copy of Report KO-3330, but we will deem that this is marked Exhibit "F" for Identification and will obtain a copy in due course.

Q Would you look at this manual and tell me whether or not that shows the type of hatch cover that you saw on the "Antonios Demades"?

A Yes.

Q I will ask that be marked as Exhibit "G" for Identification.

(MANUAL MARKED EXHIBIT "G" FOR IDENTIFICATION).

MR. ALLEN: I have no further questions.

CROSS-EXAMINATION BY MR. JACOBSEN:

Q Mr. Omachi, referring to Exhibit "A", you note the damage found in Items 1, 2, 3, 4, 5 and 6?

A Yes.

Q These are all in the very forward part of the vessel are they not?

A Yes, in the forward end.

Q Do you know what kind of weather the vessel had, which

23-12

Exhibit 23

the ship?

A Yes.

Q Was there any damage to the hatch covers at Number One, or elsewhere, as a result of this heavy weather that is referred to in Exhibit "A"?

A I beg your pardon?

Q Were any of the hatch covers damaged at this time because of the heavy weather?

A I don't think so.

Q There was no heavy weather damage to the hatch covers from this incident in that survey, is that right?

A Yes.

Q Mr. Omachi, referring to Exhibit "B", which is 3333, Item 27, you see the damage referred to there?

A Yes.

Q That item refers to the damage caused by the grounding?

A Yes, because this was reported by the owner's representative and also the captain.

Q They told you this?

A Yes.

Q So your view is based on what they told you?

A Yes, because I found from the damage, in some cases, I can't decide what caused the damage.

Q Because you weren't there?

A Yes, I wasn't there at the time of the damage.

Q In your own view, is it more likely that hatch cover

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Exhibit 23

damage would have been caused by the heavy weather, which caused all this damage that is referred to in Exhibit "A" on the one hand, rather than grounding on the other?

A I don't think so.

Q You think the damage to the hatch covers was not caused by the heavy weather?

A No, I don't think so.

Q Then as I understand it, you think the damage to the hatch covers was caused by the grounding?

A Yes.

Q And that the hatch covers, which are on top of the vessel, were damaged as a result of distortion of the vessel?

A Yes.

Q From the grounding?

A Yes.

Q Certainly the hatch covers didn't directly contact the ground when the vessel grounded?

A Hatch covers should be secured to hull construction, otherwise it cannot keep watertight. Through the gasket it must be secure, otherwise how does it keep watertight. If hatch cover not secured, it cannot keep watertight.

Q But referring to the grounding in Exhibit "B", which is 3332, how would that grounding cause the damage to

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Exhibit 23

the hatch covers referred to in Item 27? Because of buckling?

A Buckling, also if a ship go aground for a long time and try to refloat, I think the hull construction get some deformation or something like this.

Q Distortion?

A Yes, distortion, or I think deformation.

Q Exhibit "G" here, did you have this with you when you conducted your survey?

A No, I did not have it.

Q Have you seen this before this week?

A Yes.

Q When did you see it?

A Yesterday.

Q You saw it yesterday for the first time?

A Yes, the first time.

Q Referring to Exhibit E-3, Item 9, were you there when the hose test was conducted?

A Yes.

Q How many covers were there at Number One hatch?

A I don't remember, but I think four or five.

Q How many does the invoice say, Exhibit E-3?

A Four covers.

Q That shows four hatch covers at Number One hatch?

A Yes.

Q Far as you know were there four there?

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Exhibit 23

Q Was there any air test conducted on Number One?
A Hatch cover?
Q Yes?
A No, I don't think so.
Q No pressure test?
A Hose test means a pressure test.
Q I mean air pressure test?
A No, water pressure.
Q But no air pressure test?
A No air pressure.
Q Did you keep any data for any of these inspections or tests that you performed?
A No, I don't think so, because I got transfer from Japan to Singapore. Before that I had many records.
Q This is all in Kobe?
A Yes, Kobe.
Q You did have some notes at the time?
A Yes, at the time, because to write reports and also later on if some question arises.
Q Did you have any plans with you at the time you conducted your surveys in Kobe?
A Plans?
Q Ship's plans?
A No.
Q You didn't have the original plans?
A No, because on repair vessel, we are not supplied with

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Exhibit 23

plans. On repair vessel we are not supplied with any drawings. If necessary I have to ask captain or owner's representative to get plans.

Q Do you recall if you did?

A I checked some drawings on the vessel, but for hatch covers I don't think so, because this is just ordinary type of hatch cover and not special.

Q You don't think you checked any plans of the hatch covers?

A I don't think so, no.

Q Were you advised of any alterations or casualties to Number One hatch?

A No.

Q Other than what you saw and you put in your report here, in the grounding survey, which is Exhibit "B", Item 27, you don't know of any alterations or repairs other than that?

A No. I remember it was brought back to original condition.

Q But you didn't hear of any alterations or damage or casualty to Number One, either before this Exhibit "B" or after this Exhibit "B" survey report by you, where you refer to the Number One hatch cover, among others, in Item 27?

A What do you mean?

Q I will ask another question. Other than what is said

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Exhibit 23

in Item 27 of Exhibit "B", you don't know of any alterations or other damage to Number One hatch?

A No, I don't.

Q You don't know if A.B.S. was advised of any?

A No, I don't know.

Q But you yourself weren't?

A No.

Q What about the bulkheads. Were there any tests conducted on the bulkheads in your inspection in Kobe?

A No, I don't think so.

Q Is it Kobe or Osaka?

A Office in Kobe, but port in Osaka.

Q There were no tests conducted on the bulkheads?

A No.

Q None conducted in connection with the Number One Special Survey?

A No, that is not required.

Q And none conducted anyway?

A No.

Q Have you performed air tests of hulls in connection with looking at bulkheads?

A Air testing?

Q Yes?

A I don't have records here, but KO-3330, we don't have that record here, but so far as I remember, side shell damage and also side shell plating in the

2-3-18

Exhibit 23

way of Number One hold were renewed and this side shell plating in the transverse bulkhead, we tested.

Q Where was the damage that is reported in Survey 3330, which is Exhibit "F", if you remember?

A Side shell plating number one and number two, like this.

Q Which side?

A I think port. I am not sure.

Q Port or starboard?

A Yes, anyway.

Q There weren't any hose tests conducted of the bulkheads?

A The bulkheads, yes.

Q There were hose tests?

A If the side shell plating is renewed adjacent to the bulkhead, then we hose test.

Q When was your survey 3330 conducted?

A Same time as these other damage.

Q Then did you perform a hose test on the side shell plating?

A Yes, of course.

Q Did you inspect the drainage system on the "Antonios Pamadas"?

A Yes.

Q What did you do?

A Just visual inspection.

Q Do you recall where the pump is for Number One hold?

A I think in the engine room.

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Exhibit 23

Q What about 2 and 3?
A Also the same, I think so.
Q But you are not sure?
A I am not sure because I don't have the plan here.
Q Do you know what the fuel consumption is on these ships, like the "Antonios Demades", approximately? If you know?
A I think 160 grammes power per hour. So far as I remember from owner's representative, the engine was not in so bad condition, so that means 160 grammes per B.H.P. per hour.
Q Can you give it to us in per tons per day?
A I don't remember how much engine horsepower now.
Q Have you inspected other Livanos ships of the same class?
A Yes.
Q Do you remember the names of some of those ships?
A "Nestos" and "Atlantic Dream".
Q Possibly some others?
A So far as I remember I surveyed this type of vessel four or five.
Q You didn't have any sea trials, did you, in connection with your special survey?
A No.
Q And you don't have any data sheets or supporting data with you from your survey, particularly your Special

23-20

Exhibit 23

Number One?

A No, I don't have.

Q Did you perform any tests with the drainage system

A No.

Q Do you recall looking at a loading manual?

A Yes,I think so.

Q Did you check the loading manual?

A I didn't check the inside details, but so far I remember I saw it on board.

Q What did you check for in the way of documents?

A Because this belong to matter of technical staff, when ship was built, checked by technical staff and stamped.

Q So do you recall for sure what you saw in the way of documents? Would your supporting data show this?

A I think so, but I didn't check details of that data.

Q You didn't check to see what they had on board in the way of documents?

A No.

Q You referred to some indentations in the bulkheads?

A Yes.

Q In connection with Item 9 of the invoice E-2. How big were those indentations?

A I think small, because I don't remember and also, I didn't recommend any repair.

Q Can you give us any estimate of size?

23-21

Exhibit 23

A I cannot.
Q You can't recall?
A I don't remember.
Q Too many years ago?
A Yes and also too small.
MR. JACOBSEN: No further questions.
RE-EXAMINATION BY MR. ALLEN:
Q Did you certify in your report that there were no--you found no alterations to any of the watertight openings?
A No. If I did, then I write a report.
Q Exhibit "C" records your observation in that respect?
A Yes.
Q Then you said you surveyed a number of the same class ship?
A Yes.
Q As a result of your survey of those ships, can you say whether in general they were constructed stronger or weaker or about even with other ships of the same vintage?
A I can say only using rather heavy construction.
Q Are you testifying in the English language today?
A Yes.
Q And your native tongue is Japanese?
A Yes.
MR. ALLEN: That is all.

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Exhbit 24

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EX. F. 5

(Kobe Survey No. 3330)

American Bureau of Shipping

45 BROAD STREET, NEW YORK, N. Y. 10004

RECVD
29 JUL 1969
Ansd

Report No. KO3330

Kobe, Japan, January 20, 1969

M.S. "ANTONIOS DEMADES"

THIS IS TO CERTIFY that the undersigned Surveyor to this Bureau did, at the request of the S. Livanos Shipbroker's Representative, Osaka, Japan, attend the single screw steel motorship "ANTONIOS DEMADES" of Monrovia, Liberia, Official Number 1681 on the 30th day of December 1968 and subsequent dates, while the vessel lay on drydock at Hitachi Shipbuilding & Engineering Co., Ltd., Chikko Shipyard, Osaka, Japan, in order to examine and report upon damage alleged to have been sustained as a consequence of the vessel's having contacted lock wall at Wellans Canal on July 19, 1968 while enroute from Antwerp, Belgium to Cleveland, Ohio. For further particulars see the vessel's log book and report as follows:

Upon Examination Found:	Recommended:
Port side:	
1. Side shell plates "G-15", "G-16" and "G-17" set in over entire length to a maximum depth of approximately 40 mm.	1. Renew "G-15", "G-16" and "G-17" plates.
2. Aft end of side shell plate "G-18" set in to a depth of approximately 30 mm.	2. Crop and part renew "G-18" plate for full width between original butt at Fr. No. 191a and new butt at Fr. No. 193a on one plate of above noted "G-17".
3. Side shell plates "H-16" and "H-17" set in over entire length to a maximum depth of approximately 60 mm.	3. Renew "H-16" and "H-17" plates.
4. Side shell plates "F-15", "F-16", "F-17", "H-15", "H-18", "I-16" and "I-17" set in easily adjacent to above noted "G-15", "G-16", "G-17", "H-16" and "H-17" plates.	4. Fair in place.

This Report is issued subject to the condition that it is understood and agreed that neither the Bureau nor any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by this Bureau or its Surveyors or in any entry in the Record or other publication of the Bureau or for any error of judgment, default or negligence of its Officers, Surveyors or Agents.

Report No. KC3330 *Exhibit 24* M.V. "ANTONIOS DEMADES"

5. Internals in way of above noted side shell plates affected.	5. (a) Crop and part renew side shell frames No. 168, 169, 173, 175, 180, 184 and 185 for a height of 4,500 mm or 5,000 mm. (b) Fair in place side shell frames No. 170, 171, 172, 174, 176, 177, 178, 179, 181, 182, 183, 186, 187, 188, 190, 191 and 193. (c) Crop and part renew port end of transverse bulkhead at Fr. No. 167 for an area of 1000 mm width by 3500 mm height. (d) Fair in place port end of transverse bulkhead at Fr. No. 192. (e) Crop and part renew side shell frames No. 156, 158, 163, 165 and 166 for a height of 3000 mm. (f) Fair in place side shell frames No. 155, 157, 159, 160, 161, 162 and 164.
6. Side shell plate "I-4" set in over entire length to a maximum depth of approximately 40 mm.	6. Renew "I-4" plate.
7. Side shell plates "H-4" and "J-4" set in easily adjacent to above noted "I-4" plate.	7. Fair in place.
8. Internals in way of above noted side shell plates affected.	8. (a) Crop and part renew side shell frames No. 17, 20, 22 and 23 for a height of 2,000 mm. (b) Fair in place side shell frames No. 16, 21, 24 and 25. (c) Crop and part renew port end of transverse bulkhead at Fr. No. 19 for an area of 500 mm width by 1500 mm height.

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		(d) Pair in place port end of transverse bulkheads at Fr. No. 18 and 26.
9.	Boat deck stringer plates and curtain plates buckled between Fr. No. 21 and 22.	9. Crop and part renew stringer plate for full width between Fr. No. 20½ and 22½ together with curtain plate.
	Starboard side:	
10.	Side shell plate "C-3" set in easily between Fr. No. 35 and 37.	10. Pair in place.
	Port & starboard sides:	
11.	Eye-brows just above port-holes in way of poop quarter side shell plates crushed.	11. Renew.
12.		12. Hydrostatic or hose test and prove tight all affected area of side shell and bulkhead plates at the completion of above repairs.
13.		13. Recoat as original all affected and disturbed area.

All above recommendations were carried out at this time, examined and found satisfactory.

The undersigned recommends that this vessel be retained as classed with this Bureau.

A. Omachi
Surveyor

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220

J 341a

Exhibit 25

(Kobe Survey No. 3331) # 25

American Bureau of Shipping

45 BROAD STREET, NEW YORK, N. Y. 10004

Report No. KO3331 Kobe, Japan, January 20, 1969

M.S. "ANTONIOS DEMADES"

THIS IS TO CERTIFY that the undersigned Surveyor to this Bureau did, at the request of the J. Livanos Shipbrokers Representative, Osaka, Japan, attend the single screw steel motorship "ANTONIOS DEMADES" of Monrovia, Liberia, Official Number 1881 on the 6th day of January 1969 and subsequent dates, while the vessel lay on drydock and afloat at Hitachi Shipbuilding & Engineering Co., Ltd., Chikko Shipyard, Osaka, Japan in order to examine and report upon damage alleged to have been sustained as a consequence of the vessel's having encountered heavy weather while enroute from New Orleans, La. to Kobe, Japan in a loaded condition. For further particulars see the vessel's log book and report as follows:

Upon Examination Found:	Recommended:
1. Forecastle deck stringer plate buckled to a maximum depth of approximately 30 mm between Fr. No. 233 and 238 on starboard side.	1. Renew stringer plate for a width of 1800 mm between original butts at Fr. No. 231 and 241½ together with carling plates underneath and at inboard ends of bulwark stays.
2. Bulwark set in moderately and bulwark stays buckled on forecastle deck starboard side.	2. Fair in place bulwark plate, renew five (5) bulwark stays and fair three (3).
3. Handrail set in moderately on forecastle deck starboard side for a length of approximately 5 M on starboard side.	3. Fair.
4. One (1) anchor ball stanchion distorted at forecastle head.	4. Renew.
5. One (1) davit for Suez Canal light distorted.	5. Crop and part renew.
6. Total approximately 175 M of handrail distorted on upper deck port and starboard sides.	6. Crop and part renew or fair.

This Report is issued subject to the condition that it is understood and agreed that neither the Bureau nor any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any statement or certificate issued by this Bureau or its Surveyors or in any entry in the Record or other publications of the Bureau or for any error of judgment, default or negligence of its Officers, Surveyors or Agents.

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Exhibit 25

Report No. RC3331 M.S. "ANTONIOS DEMADES"

7.	Wooden awning on poop deck distorted together with steel stanchions.	7.	Renew as found necessary.
8.	Steel plate pipe guards missing or distorted at numerous locations on upper deck port and starboard sides.	8.	Renew.
9.	Inboard wall of starboard aft fuel oil deep tank fractured horizontally to a length of approximately 300 mm in way of top side tank bottom plate connection also welded connection between inboard and forward walls fractured to a length of approximately 300 mm.	9.	Crop and part renew inboard wall for an area of 500 mm by 600 mm, properly prepare and reweld fracture at welded connection and install suitable steel plate doubler.
10.		10.	Hose test and prove tight affected area of forecastle deck plate.
11.		11.	Hydrostatic test and prove tight starboard aft fuel oil deep tank.
12.		12.	Recoat as original all affected and disturbed area.

All above recommendations were carried out at this time, examined and found satisfactory.

The undersigned recommends that this vessel be retained as classed with this Bureau.

A. Omachi
Surveyor

25-2 ++2

J 343a

Exhibit 26

(Kobe Survey No. 3332) 426

American Bureau of Shipping

45 BROAD STREET, NEW YORK, N. Y. 10004

OHASHI Ex. B

Report No. KO3332 — Kobe, Japan, January 29, 1969

S.S. "ANTONIOS MENADES"

THIS IS TO CERTIFY that the undersigned Surveyor to this Bureau did, at the request of the S. Livanos Shiprokers Representative, Osaka, Japan, attend the single screw steel motorship "ANTONIOS MENADES" of Monrovia, Liberia, Official Number 1881 on the 29th day of December 1968 and subsequent dates, while the vessel lay on drydock and afloat at Hitachi Shipbuilding & Engineering Co., Ltd., Chikko Shipyard, Osaka, Japan in order to examine and report upon damage alleged to have been sustained as a consequence of the vessel's having grounded at Delta Sugno Bank on October 26, 1968 and refloated on November 5, 1968. For further particulars see the vessel's log book and report as follows:

Upon Examination Found:	Recommended:
Bottom plates:	
1. Flat keel plate "FK-18" set up over entire length to a maximum depth of approximately 35 mm.	1. Renew "FK-18" plate.
2. Flat keel plates "FK-4" and "FK-3" set up over entire length to a maximum depth of 60 mm and 40 mm respectively.	2. Renew "FK-4" and "FK-3" plates.
3. "A-19" and "A-18" plates on port side set up over entire length to a maximum depth of approximately 35 mm.	3. Renew "A-19" and "A-18" plates.
4. "A-10" and "A-9" plates on port side set up over entire length to a maximum depth of approximately 35 mm.	4. Renew "A-10" and "A-9" plates.
5. "A-6", "A-5" and "A-4" plates on port side set up over entire length to a maximum depth of approximately 40 mm.	5. Renew "A-6", "A-5" and "A-4" plates.

This Report is issued subject to the condition that it is understood and agreed that neither the Bureau nor any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by the Bureau or its surveyors or in any entry in the Record or other publication of the Bureau or for any error of judgment, default or negligence of its Officers, Surveyors or Agents.

6. "B-7" and "B-6" plates on port side set up over entire length to a maximum depth of approximately 35 mm.	6. Renew "B-7" and "B-6" plates.
7. "B-3" plate on port side set up over entire length to a maximum depth of approximately 35 mm.	7. Renew "B-3" plate.
8. "C-13" and "C-12" plates on port side set up over entire length to a maximum depth of approximately 35 mm.	8. Renew "C-13" and "C-12" plates.
9. "C-5" and "C-4" plates on port side set up over entire length to a maximum depth of approximately 35 mm.	9. Renew "C-5" and "C-4" plates.
10. Aft half of "D-19" and entire length of "D-18" plates on port side set up to a maximum depth of approximately 45 mm.	10. Crop and part renew "D-19" plate for full width between new butt at Fr. No. 196½ and original butt at Fr. No. 190½ and renew "D-18" plate.
11. "D-14" plate on port side set up over entire length to a maximum depth of approximately 20 mm.	11. Fair in place.
12. "C-11", "C-10", "D-17" and "D-16" plates on port side set up along riveted seam to a maximum depth of approximately 20 mm.	12. Release riveted seam and fair in place.
13. "A-19" plate on starboard side set up over entire length to a maximum depth of approximately 35 mm.	13. Renew "A-19" plate.
14. "A-6", "A-5" and "A-4" plates on starboard side set up over entire length to a maximum depth of approximately 40 mm.	14. Renew "A-6", "A-5" and "A-4" plates.
15. "B-16" plate on starboard side set up over entire length to a maximum depth of approximately 35 mm.	15. Renew "B-16" plate.

Exhibit 26

[illegible]	16. Renew "F-3" plate.
17. [illegible], "C-12", "C-11" and [illegible] plates on starboard [illegible] set up over entire [illegible] to a maximum depth approximately 40 m.	17. Renew "C-11", "C-12", "C-13" and "C-14" plates.
18. [illegible] plate on starboard [illegible] set up over entire length to a maximum depth approximately 40 m.	18. Renew "C-9" plate.
19. [illegible], "D-11", "D-12" and [illegible] plated on starboard side set up over entire length to a maximum depth of approximately 40 m.	19. Renew "D-9", "D-10", "D-11" and "D-12" plates.
20. [illegible] plate on starboard side set up over entire length to a maximum depth of approximately 35 m.	20. Renew "D-8" plate.
21. [illegible], "A-7", "A-8", "B-7" and "B-8" plates on starboard side set up evenly over entire length.	21. Fair in place.
22. [illegible], "C-6" and "C-12" inner set up to a maximum depth of approximately 20 m along riveted seam between Fr. No. 122 and 116.	22. Reclose riveted seam and fair in place.
23. Internals in way of above [illegible] bottom plates affected.	23. (a) Port [illegible] tank Fair in place lower section of water tight floor at Fr. No. 215. (b) No. 1 double bottom [illegible] tank Drop and part renew lower section of floors at Fr. No. 249, 207, 197, 197, 197 and 195.

26-3

Pair in place lower section of floors at Fr. No. 214 through 210, 208, 206, 205, 204, 202 through 196 and 194 through 192.

Crop and part renew No. 2 longitudinal girder between Fr. No. 210 and 206 and No. 7 girder between Fr. No. 199 and 192.

Pair in place No. 1, 2 and 3 longitudinal girders.

Pair in place side girder.

(c) No. 1 double bottom tank starboard

Crop and part renew lower section of floors at Fr. No. 211 through 209, 206, 198 through 196 and 194.

Pair in place lower section of floors at Fr. No. 214 through 212, 208, 207, 205, 204, 202, 201, 199, 195, 193 and 192.

Crop and part renew No. 3 longitudinal girder between Fr. No. 215 and 205.

Crop and part renew No. 4 longitudinal girder between Fr. No. 213 and 205.

Crop and part renew No. 7 longitudinal girder between Fr. No. 199 and 192.

Pair in place No. 1, No. 2, No. 3, No. 5 and No. 6 longitudinal girders.

Pair in place side girder.

(d) Keel just in way of No. 1 double bottom tank

Pair in place center line girder.

Pair in place lower section of floors at Fr. No. 214, 213, 211, 210, 208 through 205 and 203.

(e) No. 2 double bottom tank port

Pair in place lower section of floors at Fr. No. 189, 187, 185, 183, 181 and 179.

Crop and part renew No. 7 longitudinal girder between Fr. No. 185 and 179.

Pair in place side girder.

Crop and part renew No. 1 bottom longitudinal between Fr. No. 189 and 179, No. 2 between Fr. No. 189 and 181 and No. 3 between Fr. No. 185 and 181.

(f) No. 2 double bottom tank starboard

Crop and part renew lower section of floors at Fr. No. 179, 177, 173 and 171.

Pair in place lower section of floors at Fr. No. 189, 187, 185, 183, 181, 177, 175, 173, 171, 169 and 167.

Crop and part renew No. 7 longitudinal girder between Fr. No. 179 and 169, No. 8 girder between Fr. No. 179 and 167 and pair in place remaining area.

Crop and part renew lower portion of side girder between fr. No. 166 and 167 and fair in place remaining area.

Crop and part renew No. 1 and No. 2 bottom longitudinals between fr. No. 177 and 167.

(g) No. 3 double bottom tank starboard

Crop and part renew lower section of floors at fr. No. 158, 151 and 132.

Fair in place lower section of floors at fr. No. 165, 163, 161, 149, 147, 145 and 112.

Crop and part renew No. 1 bottom longitudinal between fr. No. 157 and 149, No. 2 between fr. No. 167 and 145 and fair in place remaining area.

(h) No. 4 double bottom tank starboard

Crop and part renew lower section of floors at fr. No. 137 and 134.

Fair in place lower section of floors at fr. No. 139 and 136.

Crop and part renew lower section of No. 1 and No.3 longitudinal strakes between fr. no. 139 and 134 and fair in place remaining area.

Crop and part renew lower section of side girder between fr. No. 134 and 131 and fair in place remaining area.

Crop and part renew No.1 bottom longitudinals between Fr. No. 142 and 134.

Fair in place No. 2 bottom longitudinal between Fr. No. 142 and 134.

(i) <u>No. 5 double bottom tank port</u>

Crop and part renew lower section of floors at Fr. No. 105 and 99.

Fair in place lower section of floors at Fr. No. 105, 102, 99, 96 and 94.

Crop and part renew lower section of No. 2, 3, 4, 6 and 8 longitudinal girders between Fr. No. 102 and 97 and No. 7 between Fr. No. 102 and 94.

Fair in place No. 2, 3, 4, 5, 6, 7 and 8 longitudinal girders.

Fair in place lower section of side girder.

(j) <u>No. 6 double bottom tank port</u>

Crop and part renew lower section of floor at Fr. No. 66.

Fair in place lower section of floors at Fr. No. 92, 89 and 86.

Crop and part renew No.3, 4, 6 and 8 longitudinal girders between Fr. No. 96 and 83, No. 2 and 5 between Fr. No. 89 and 83 and No. 7 between Fr. No. 92 and 83.

Fair in place lower sections of No. 2, 3, 4, 5, 6, 7 and 8 bottom longitudinals.

Crop and part renew lower section of side girder between Fr. No. 85 and 82 and fair in place remaining area.

(k) No. 6 double bottom tank starboard

Fair in place lower section of floors at Fr. No. 94, 92, 89, 86, 83 and 80.

Crop and part renew lower section of No. 7 longitudinal girders between Fr. No. 94 and 89, No. 8 between Fr. No. 90 and 84 and fair in place remaining area.

Fair in place lower section of side girder.

Crop and part renew No. 1 and No. 2 bottom longitudinals between Fr. No. 90 and 80.

(l) No. 7 double bottom tank port

Crop and part renew lower section of floor at Fr. No. 55.

Fair in place lower section of floors at Fr. No. 59, 58, 52 and 51.

Crop and part renew lower section of No. 3 longitudinal girder between Fr. No. 55 and 50 and No. 5 between Fr. No. 60 and 55.

Pair in place lower section of Fr. 2, 3, 4 and 5 longitudinal girders.

(m) No. 4 double bottom tank starboard

Crop and part renew lower section of floor at Fr. No. 55.

Pair in place lower section of floors at Fr. No. 56, 52, 51 and 50.

Crop and part renew lower section of No. 2 and No.3 longitudinal girders between Fr. No. 61 and 55.

Pair in place lower section of No. 2, 3, 4 and 5 longitudinal girders.

(n) Double bottom diesel oil tank port

Pair in place lower section of floors at Fr. No. 48 through 42, 40, 39, 38 and 36.

Crop and part renew lower section of side girder between Fr. No. 33 and 29 and pair in place remaining area.

(o) Double bottom diesel oil tank starboard

Pair in place lower section of floors at Fr. No. 43 through 40, 38, 37 and 35.

Crop and part renew lower section of side girder between Fr. No. 31 and 23 and pair in place remaining area.

26-9

(p) Double bottom [illegible] tank

Pair in place lower section of floors at Fr. No. 48 through 44.

Pair in place lower section of side girder.

(q) Double bottom cooling water tank

Pair in place lower section of floors at Fr. No. 49 through 47.

Pair in place lower section of side girder.

(r) Double bottom lube oil used tank

Pair in place lower section of floors at Fr. No. 46 and 45.

(s) Double bottom feed water tank

Pair in place lower section of floors at Fr. No. 24 through 22.

(t) Coffering under and around tube oil tank

Crop and part renew lower section of floors at Fr. No. 40, 38, 37, 33 and 32.

Pair in place lower section of floors at Fr. No. 44 through 42, 39, 36, 35, 34, 31 and 30 through 25.

Pair in place lower section of center girder and side girders on port and starboard sides.

26-10

24.	24. Hydrostatic test and prove tight all affected double bottom tanks at the completion of repairs.
25. Handrail distorted to a total length of approximately 7 M on poop deck together with stanchions.	25. Crop and part renew and/or fair in place.
26. Bulwark plate distorted on poop deck forward passageway.	26. Crop and part renew and/or fair in place.
27. Steel hatch covers (Mac Gregor type) and hatch coaming top edge deformed at No. 1 through No. 7 hatches.	27. (a) Remove affected hatch covers and fair affected area. (b) Re-adjust all affected hatch cover connecting chains. (c) Build up by welding and ground smooth all affected area of hatch coaming top edge and bring in good level. (d) Hose test all hatch covers in place and prove tight at the completion of above repairs.
28. Echo sounder distorted.	28. Repair echo sounder and check and repair electrical circuits as found necessary.
29. Water dripping through propeller hub forward gland and fair water cap joint.	29. Remove propeller from tailshaft, examined tailshaft and propeller.
30. Several fine fractures noted circumferentially on both sides of key way spooning.	30. Ground off fractures and dress up affected area.
31. Propeller satisfactory.	31.
32.	32. Reinstall tailshaft and propeller in good order.

33. Main engine No. 1 through No. 8 crosshead pin bearing lower halves and No. 4 and No. 5 upper halves fractured and/or scored.	33. Remetal bearings, polish and smooth up crosshead pins.
34. Main engine No. 2 and No. 3 crank pin bearing upper halves and No. 1 and No. 3 lower halves fractured and/or scored.	34. Remetal bearings, polish and smooth up crank pins.
35. Main engine No. 2, 4 and 7 main bearing upper halves fractured and broken off.	35. Remetal bearings, polish and smooth up crank journals.
36. Main engine No. 1, 2, 4 and 8 cylinder cover contact surface to cylinder liner leaking.	36. (a) Remove cylinder covers to shop, machine up contact surface. (b) Smooth up cylinder liner contact surface in place.
37. Welding connection and joining flange of main engine air suction pipe fractured.	37. Crop and part renew suction pipe and properly prepare and reweld fractures.
38.	38. Open, clean and examine main thrust bearing.
39. Main thrust bearing satisfactory.	39.
40.	40. Re-align main engine in good order at the completion of repairs.
41. All heating tubes on exhaust gas boiler over heated.	41. (a) Renew all heating tubes. (b) Hydrostatic test and prove tight exhaust gas boiler at the completion of above repairs.
42. Driving gear casing on No. 2 auxiliary generator engine fractured to a length of approximately 160 mm.	42. Repair by "Meta-Lock".
43. One (1) cam shaft driving gear on starboard lifeboat engine broken.	43. Renew.

Exhibit 26

Report No. 403332 - 13 - M.S. "ANTONIOS DEMADES"

44. 44. Open up, clean, examine and repair as found necessary following heat exchangers:

Two (2) - main lube oil coolers.
Three (3) - lube oil coolers for auxiliary generator engine.
Three (3) - fresh water coolers for auxiliary generator engine.
Four (4) - air coolers for No. 1 & No. 2 air compressors.
Six (6) - air coolers for main engine.
One (1) - fuel valve cooling oil cooler for main engine.
Two (2) - main fresh water coolers.

45. 45. Open up, cleaned, examine and repair as found necessary following pumps:

Main sea water circulating pump.
Auxiliary sea water circulating pump.
One (1) - Ballast pump.
One (1) - Cooling water pump for reefer machinery.

46. 46. Open up, clean, examine sea chests and sea valves and repair as found necessary.

47. 47. Recoat as original all affected and disturbed area.

48. 48. Necessary dock trial and sea trial be carried out.

All above recommendations were carried out at this time, examined and found satisfactory.

The undersigned recommends that this vessel be retained as classed with this Bureau.

A. Omachi
Surveyor

26-13
xxx

J 356a

Exhibit 27

(Kobe Survey No. 3333)

American Bureau of Shipping

45 BROAD STREET, NEW YORK, N. Y. 10004

29 JUL 1969
Ansd

Report No. KO3333

Kobe, Japan, January 29, 1969

M.S. "ANTONIOS DEMADES"

THIS IS TO CERTIFY that the undersigned Surveyor to this Bureau did, at the request of the G. Livanos Shipbrokers Representative, Osaka, Japan, attend the single screw steel motorship "ANTONIOS DEMADES" of Monrovia, Liberia, Official Number 1681 on the 29th day of December 1968 and subsequent dates, while the vessel lay on drydock and afloat at Hitachi Shipbuilding & Engineering Co., Ltd., Chikko Shipyard, Osaka, Japan in order to carry out a Drydocking Survey, Tailshaft Survey, Completion of Special Survey No. 1 of Hull, Annual Classification Survey, Continuous Survey of Machinery and Annual Boiler Survey. For particulars see the report as follows:

Drydocking

1. The vessel was placed on drydock and cleaned, the stem, keel, stern frame, outside of plating and bilge keels were examined and placed in satisfactory condition as reported in Kobe report No. KO3330, KO3331 & KO3332 dated January 20, 1969 and January 29, 1969 respectively.

2. The underwater body was recoated to the deep draft water line.

3. The rudder and stock were examined and found in satisfactory condition. Intermediate bearing, upper and lower rudder bearing clearances were measured and found satisfactory.

4. Sea strainer plates were removed and seachests were cleaned, examined, found satisfactory and recoated. The strainer plates were resecured in good order.

5. The sea valves were opened up, cleaned, ground in, examined and found in satisfactory condition.

   The valves were repacked and closed up in good order.

6. The propeller is solid bronze with 4 blades. It was examined and found in satisfactory condition.

7. The clearance of the tailshaft in the stern bearing was measured and found to be 2.60 mm.

This Report is issued subject to the condition that it is understood and agreed that neither the Bureau nor any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by this Bureau or its Surveyors or in any entry in the Record or other publication of the Bureau or for any error of judgment, default or negligence of its Officers, Surveyors or Agents.

8. The tailshaft was drawn at this time (January, 1969) cleaned and examined by aid of magnetic particle method, including the liner, taper, key and keyway, and placed in satisfactory condition as reported in Kobe report No. K03332 dated January 29, 1969.

9. The tailshaft was reinstalled and connected to the line shafting in good order. The propeller was fitted and secured with a rubber s[illegible] the hub. The stern gland was repacked.

[illegible]tion of Special Survey No. 1 of Hull

10. The following tanks were opened, cleaned, examined internally and found or placed in satisfactory condition.
For damage repairs please see Kobe report No. K03332 dated January 29, 1969.

(a) Double bottom fresh water tank in engine room

(b) Double bottom feed water tank in engine room

(c) Fresh water tanks on 2nd deck at engine room aft, port and starboard.

11. The following tanks were hydrostatically tested to Rule's Requirement, examined and found satisfactory.

No. 1 through No. 7 topside tanks, port and starboard

Annual Classification Survey

Hull

12. The ventilators, hatch coamings, covers and their supports and tarpaulins [illegible] examined and found in satisfactory condition.

13. The closing appliances in superstructure bulkheads and for air and sounding pipes were examined and found in satisfactory condition.

14. The machinery casings, guard rails and means of protection for openings and for access to crew's quarters were examined and found or placed in satisfactory condition.

15. Fore and aft portable gangways between superstructures on upper deck were examined and found in satisfactory condition.

16. The steering arrangements including gear and transmission were examined and found in satisfactory condition.

17. No alterations have been made to the vessel which would affect the loadline assignment.

27-2

18. Annual Loadline Inspection was carried out at this time, and International Loadline Certificate Number 1-19,293 was renewed. See Report No. KO3334 dated January 29, 1969.

Machinery

19. A general examination of engine not otherwise opened at this time, steering machinery and fire extinguishing apparatus was made and all found or placed in satisfactory condition.

Continuous Survey of Machinery

Completion of the current cycle:

20. Main engine No. 1 through No. 10 main bearings were opened, journals and bearings were cleaned, examined and found or placed in satisfactory condition as reported in Kobe report No. KO3332 dated January 29, 1969.

21. Main engine No. 2, 3 and 5 scavenging pumps and air valves were opened, cleaned, examined and found in satisfactory condition.

22. Main engine No. 1 through No. 8 fuel oil injection pumps were opened, cleaned, examined and found in satisfactory condition.

23. Main thrust bearing was opened, thrust pads, bearing and thrust shaft were cleaned, examined and found in satisfactory condition.

24. The following pumps were opened, cleaned, examined and found in satisfactory condition:

(a) No. 1 (forward) lube oil pump
(b) No. 1 (aft) auxiliary sea water circulating pump
(c) No. 1 (inboard) bilge pump
(d) General service pump
(e) Diesel oil transfer pump
(f) Bilge and ballast pump in pump room

25. The following heat exchangers were opened, cleaned, examined and found in satisfactory condition.

(a) Starboard main lube oil cooler
(b) Main engine fuel valve cooling oil cooler

26. The anchor windlass was opened, cleaned, examined and found in satisfactory condition.

27. Diesel driven emergency air compressor was opened, cleaned, examined and found in satisfactory condition.

28. Pumping arrangement including piping, valves and strainers was examined, bilge suction was tried at random locations and found in satisfactory condition.

29. Port side auxiliary generator engine was opened as found necessary, examined and re-assembled, tested under loaded condition singularly and in paraloll with another generators and found to operate satisfactorily. Overspeed and lube oil failure protective devices were tried out and found to operate in good order.

Commencement of the second cycle:

Main engine & shafting:

30. No. 1, 2, 4 and 8 cylinder heads were opened, cleaned, examined and found or placed in satisfactory condition as reported in Kobe report No. K03332 dated January 29, 1969.

31. No. 1 through No. 8 crosshead pin bearings were opened, crosshead pins and bearings were cleaned, examined together with guides and guide shoes and placed in satisfactory condition as reported in Kobe report No. K03332 dated January 29, 1969.

32. No. 1 through No. 8 crank pin bearings were opened, crank pins and bearings were cleaned, examined together with connecting rods and placed in satisfactory condition as reported in Kobe report No. K03332 dated January 29, 1969.

33. 1st and 2nd stage scavenging air coolers for all cylinders were opened, cleaned, examined and found in satisfactory condition.

34. Forward and aft turbo-chargers were opened, rotors, shafts, blades, bearings and casings were cleaned, examined and found in satisfactory condition.

Auxiliary machinery:

35. Inboard main sea water circulating pump was opened, cleaned, examined and found in satisfactory condition

36. The following heat exchangers were opened, cleaned, examined and found in satisfactory condition.

(a) Port main lube oil cooler
(b) Port and starboard main fresh water coolers
(c) No. 1 through No. 3 fresh water coolers for auxiliary generator engines
(d) No. 1 through No. 3 lube oil coolers for auxiliary generator engines

Annual Boiler Survey

37. Safety valves on oil fired boiler were set under steam to relieve at 102 psi.

38. Waste gas heater was opened, cleaned, examined and placed in satisfactory condition as reported in Kobe report No. KO3332 dated January 29, 1969.

* * * * *

The vessel undocked January 20, 1969
Tailshaft was drawn January, 1969
Special Survey No. 1 of Hull considered completed. January, 1969
Annual Classification Survey and Loadline Inspection considered completed. January, 1969
Continuous Survey of Machinery, the current cycle considered completed, please see items No. 20 through 29 above and the second cycle commenced, please see items No. 30 through 36 above.
Annual Boiler Survey, completion of the current survey please see item No. 37 and commencement of the new survey please see item No. 38 above.
Safety Construction Survey satisfactorily completed. January, 1969

Outstanding recommendations in Pusan, Korea report No. PS1630 dated September 4, 1967, Portland, Oregon report No. PO1552 dated October 6, 1967, Pusan Korea report No. PS1670 dated November, 1967, Kure Japan report No. KU4321 dated December, 1967, Rotterdam report No. RO11308 dated June, 1968 and Galveston report No. G16970 dated April, 1968 considered completed, please see item No. 29 above.

Items No. 3 through 8 in Portland Oregon report No. PO1554 dated October 11, 1968 were examined and found carried out previously. - Outstanding recommendation in report No. PO1554 dated October 11, 1968 considered completed.

The undersigned recommends that this vessel be retained as classed with this Bureau.

A. Onachi
Surveyor

27-5
2nd

J 361a

Exhibit 29 (Excerpts)

(Repair Bill)

- 362 -

HITACHI ZOSEN

HITACHI SHIPBUILDING & ENGINEERING CO, LTD.

CABLE: "CHIKUHITACHI" O.
TELEPHONE: Osaka (551) 0 9
TELEX: OS 3376 or 524-2

CHIKKO SHIPYARD: 15, FUNAMACHI, TAISHO-KU, OSAKA, 551, JAPAN

E-2

COPY

OSAKA Jan. 28, 1969

Bill No. 602-193 (B)
Job No. 38-6-132-701

B I L L

To : The Master & Shipowner of
M/V "ANTONIOS DERADES"

We have pleasure in rendering our account as under and shall be very glad to receive your settlement as soon as possible.

Work Started : Dec. 29, 1968
Drydocked : Dec. 29, 1968
Undocked : Jan. 20, 1969
Work Finished : Jan. 28, 1969

DAMAGE NO.2 GROUNDING DAMAGE

SPECIFICATION
Deck Dep't

CONT

1. Renewed partly renewed the damaged bottom shell platings as follows.

Keel Plate
K-3 strake, FR. 21½ - 33½
S.Pl. : 28 t x 2.250 m x 9.700 m x 1 sec.
(box-keel)

K-4 strake, FR. 33½ - 45½
S.Pl. : 28 t x 2.250 m x 9.700 m x 1 sec.

K-17 & 18 strake, FR. 202½ - 215½
S.Pl. : 28 t x 2.300 m x 9.200 m x 1 sec.
(box-keel, and original butt at FR. 204½)

Port Side
A-4 strake, FR. 26½ - 37½
S.Pl. : 17 t x 1.850 m x 9.000 m x 1 sec.
(double curved)

A-5 strake, FR. 37½ - 48½
S.Pl. : 19 t x 2.400 m - 1.850 m x 9.200 m x 1 sec.
(double curved)

A-6 strake, FR. 48½ - 60½
S.Pl. : 21 t x 2.600 m x 9.700 m x 1 sec.

29-1

cont'd/...

7. (cont'd)
Faired in place the damaged section of poop shell plating edges on where installed above handrail, also arranged necessary stagings.

S.Pl. : 12 t x 150 x 300 x 5 places

¥115,900.-

8. Cropped and partly renewed the damaged part of the bulwark plating in way of poop front, both side.

S.Pl. : 8 t x 600 x 800 x 2 sec.
with 9 t x 70 x 600 x 2 pcs.

Also faired in place/cropped and partly renewed the damaged parts of handrails on poop front passage.

(partly renew)
S.P. : 45 dia. x 2.000 m x 1 sec.
(fair in place)
S.P. : 45 dia. x 2.500 m x 1 sec.
" x 1.500 m x 1 sec.
S.P. : 25 dia. x 1.200 m x 2 sec.
F.B. : 21 t x 65 x 1.100 m x 2 sec.

¥53,600.-

9. "Mac Gregor" hatch-covers:
a) Removed to shop, faired and refitted the "Mac Gregor" hatch-covers as follows.

Size: 260 height x 3.000 m x 11.600 m x 10 pcs.
" x 2.700 m x 8.300 m x 1 pc.

No.1 hatch : 1 pc.
No.2 hatch : 2 pcs.
No.3 " : 2 pcs.
No.4 " : 2 pcs.
No.5 hatch : 1 pc.
No.6 " : 1 pc.
No.7 " : 2 pcs.

b) Cut off the elongated link and adjust the connecting chains between all hatch-covers.

c) Carried out the operating test of all hatch covers and tested by chaulk.

d) Welded up and ground off the hatch-coaming tops on where attached hatch-covers, to adjust the level-line of all hatch-coaming top as follows.

No.1 hatch : 5.000 m in length
No.2 " : 7.000 m in length
No.3 " : 8.000 m in length
No.4 hatch : 4.000 m in length

cont'd/...

9. d) (cont'd)
No. 5 hatch : 3.000 m in legth
No.6 " : 5.000 m in length
No.7 " : 6.000 m in length

e) Upon completion of above works, carried out the hose-test of all hatch covers.

No.1 hatch : four (4) covers
No.2-7 hatches: each five (5) covers

¥1,580,000.-

10. Echo sounder:
Thoroughly checked up echo sounder system.
Carried out megger test to all wire and terminals.
Renewed one (1) missing transmitter and one (1) receiver with owner's spare.
Renewed fitting plates for transmitter and receiver.
Cut out and faced up bottom plate as accessory works for above repair.
Supplied andinstalled one (1) junction box and conduited pipe in echo sounder space.
Renewed electric cable from junction box to transmitter terminal and fulled up compound in two (2) connection terminals and one (1) junction box.

Cable DBYC-5.5 3 m
Conduit pipe 30 mm ϕ 1 m

Junction Box: 1 pc.
As accessory works, opened and closed back echo sounder space cover in fw'd pump room.
Thoroughly checked up recorder and indicater in wheal house.
Opened up, cleaned and adjusted recorder and indicator of echo sounder.

¥73,600.-

11. Sea-chest:
Removed the strainers, cleanod the strainers and chests, examined and coated with anti-galvanic paint, also arranged necessary stagings for above works.

a total : 5 sets

¥5,000.-

Engine Dep't

12. Wear down:
Took wear down of steam tube bushing and supplied copies of result.

¥5,000.-

CANAL ZONE GOVERNMENT
BALBOA HEIGHTS, CANAL ZONE
OFFICE OF THE GOVERNOR

J 364a

Exhibit 33

(Panama Canal Documents)

CERTIFICATE

I, Harold L. Anderson, Chief, Administrative Services Division (Agency Records Officer) and legal keeper of the records of the Panama Canal Company and Canal Zone Government, do hereby certify that the attached documents, described herein, are true and correct copies of the official record of such documents contained in the files of the Panama Canal Company and Canal Zone Government:

Copy of Ship's Information & Quarantine Declaration (Panama Canal Form 4398) for the "ANTONIOS DEMADES" dated January 13, 1970.

Copy of Radio Message received by Port Captain, Cristobal from the "ANTONIOS DEMADES" dated January 7, 1970.

Copy of Ship's Condition Report on the "ANTONIOS DEMADES" made by Panama Canal pilot P. L. Skrable, dated January 14, 1970.

I further certify that the office of the Agency Records Officer possesses no official seal.

In witness hereof I have hereunto set my hand at Balboa Heights, Canal Zone, on this 25th day of July, A.D. 1974.

Harold L. Anderson

Harold L. Anderson
Chief, Administrative Services Division
Agency Records Officer
Panama Canal Company
Canal Zone Government

UNITED STATES OF AMERICA)
)
Canal Zone) SS:

I, J. Patrick Conley, Executive Secretary of the Canal Zone, in charge of the Seal of the Canal Zone Government, do hereby certify that Harold L. Anderson was,

33-1

NUMBER, AGE AND CREW OF VESSEL

I HEREBY CERTIFY THAT the foregoing statements and answers to all questions are true to the best of my knowledge and belief, that the list of all persons on board my vessel is complete; and that I acknowledge receipt of instructions regarding quarantine requirements of the United States—Means and Garbage, passengers and members of the crew, and the disembarkation of crew.

Signature of Operator

Signature of ship's master

J 365a

Exhibit 33

CANAL ZONE GOVERNMENT
BALBOA HEIGHTS, CANAL ZONE
OFFICE OF THE GOVERNOR

on the twenty-fifth day of July, A.D., One Thousand Nine Hundred and Seventy-four, the duly appointed Chief, Administrative Services Division, and Agency Records Officer of the Panama Canal Company and Canal Zone Government; and further, that I am well acquainted with his handwriting and verily believe that the signature as written on the above certificate is genuine.

Witness my hand and the Seal of the Canal Zone Government at Balboa Heights, Canal Zone, this twenty-fifth day of July, A.D., One Thousand Nine Hundred and Seventy-four.

U.S. DEPT. OF AGRICULTURE

NUMBER, KIND AND ORIGIN OF ANIMALS ON BOARD

NIL

I HEREBY CERTIFY THAT the foregoing statements and answers to all questions are true to the best of my knowledge and belief, that the list of all persons on board my vessel is complete; and that I acknowledge receipt of instructions regarding quarantine requirements, Meats and Garbage.

Signature of ship's surgeon

NONE

Name typed or printed

Signature of ship's master

Name typed or printed

SARPIS

33-2

J 366a

Exhibit 33

PANAMA CANAL COMPANY

PORT CAPTAIN, CRISTOBAL

RADIO MESSAGE

CONTROLLER
ADMEASURERS
CUSTOMS
HARBOR MASTER
TERMINALS DIV.
POST OFFICE
SIGNAL STATION

Sent by HULL Rec'd by JCK

Date 1-7-, 19 70 Time 1330

29177--2500

From "ANTONIOS DEMADES"

ETA - ~~8AH~~ ETA - 13 - ~~0400~~ 0200 (AGENT) 13/0400 AGT

LIBERIAN MV ANTONIOS DEMADES DRAFT FORE 35 FEET AFTER 36 FEET FROM BOSTON TO JAPAN CARGO SCRAP NO DISEASE NO PASSENGERS NO ANIMALS NO STRUCTURAL CHANGES ETA TUESDAY MORNING REQUEST PASSING CANAL AFTER BUNKERING CRISTOBAL

BERTH

LOCAL

COLLECTOR

~~Boat~~ OK RPH

Agent FGR

Length 628

Beam 75 ~~SHW~~

Draft

REQUIREMENTS	AMOUNT
Blend X	450 T
F. Oil	
L. D. O.	
H. D. O. X	100 T
Water	
Repairs	
Cargo	
Transit	X

P/CC-1-PILOT-1-YH-6/12/JCA

33-3

444
Rev 10-55

PANAMA CANAL COMPANY

J 367a

Exhibit 33

SHIP'S CONDITION REPORT

Please check the words that apply, and fill in all blanks. Explain anything of an unsatisfactory or unusual nature under "Remarks."

To: PORT CAPTAIN ☐ BALBOA ☑ CRISTOBAL | Date 11/12/10

Pilot report on Vatavios Demadis | Flag Hon Rafini

Captain | ☑ SOUTHBOUND ☐ NORTHBOUND

☑ Motor ☐ Turbine ☐ Turbo Elect ☐ Reciprocating | No. of Screws 1 | No. of Engines 1

Bridge Location ☑ Amidships ☐ Aft ☐ Well Fwd. | Length 225 | Beam 75 | Tugs used 1 Locks or cut

	D. Slow	Slow	Half	Maneuv. Full	Max. Avail in Canal
RPM'S	45	55	75	95	—
Speed	5	7	12	14	—

Engine Response ☐ Average for type ☐ Unusually quick ☐ Delayed

Engine direction indicators	Yes ☑	No ☐
Engineroom communication system	Satisfactory ☑	Unsatisfactory ☐
Steering qualities	Satisfactory ☑	Unsatisfactory ☐
Rudder-angle indicator	Yes ☑	No ☐
Personnel	Satisfactory ☑	Unsatisfactory ☐
Chocks and Bitts:		
Location	Satisfactory ☑	Unsatisfactory ☐
Size	Satisfactory ☑	Unsatisfactory ☐
Type	Closed ☑ Roller ☐	Open ☐

(Detailed information on unsatisfactory chocks and bitts to be made in "Remarks" space.)

Is ground tackle efficient?	Yes ☑	No ☐
Is mooring and warping gear efficient?	Yes ☑	No ☐
Is subsistence satisfactory?	Yes ☑	No ☐
Location of bridge	Midships ☑	Aft ☐

General Remarks:

SHIP'S FILE

Fresh water draft: Forward 36-06 Aft 36-02

Pilot

33-4

Exhibit 33 (Continued)

Ship's Information and Quarantine Declaration

[PHOTOSTAT]

(Opposite) ☛

SHIP'S INFORMATION AND QUARANTINE DECLARATION

Radio Call Letters: 5 KBO | Arrived: CRISTOBAL | Date: 13 January 1970 | Hour of Arrival: 0420 | Hour Boarded: 0435 | Hour Cleared: 0440

Ship's Name: ANTONIOS DEMADES | Class of Vessel and Cargo: Tanker | Port of Registry: MONROVIA | Nationality: LIBERIA

DATA FROM NATIONAL REGISTER

Gross	Net	Reg. length	Overall length	Reg. beam	FUEL ON BOARD: Tons or bbls. of oil	DAILY CONSUMPTION OF FUEL: Tons or bbls.	Speed (knots)
15977	10479	569,6	628	74,9	120	35	15,5

SHIP DATA

MEAN AUTHORIZED TROPICAL DRAFT: Salt water	Fresh water	PRESENT DRAFT: Forward	Aft	DISPLACEMENT (at present draft)
36'4 3/8"	37'2 1/8"	SALT 34'10 1/2" 34,06	35'03"	33,200

Owners: ANTHONY SHIPPING Co. | ARMS AND MUNITIONS (description and quantity): NO | SDW 26220

Agents: C.FENNIE | Operators: S.Livanos,London | Charterers:

From: (Original loading port): New York | Last port and date of departure: Boston 06/01 | To: (Final port of discharge of cargo now aboard): Japan for orders | First port of call after leaving C.Z. ports:

Via: (All ports in order and dates visited within past 30 days including original loading port and wayports to final port of discharge) Antwerp 20/10,Rotterdam 23/10, Bremen 25/10 London 29/10, Lobito Angola 16/11, Baltimore 14/12, New York 20/12, Boston 28/12. (CZ)

Expected course to final port of call: NW

Expiration date of Safety Certificate: 11-10-1969

VESSEL DOCKING AT: ☒ Cristobal ☐ Balboa ☐ Cargo operation ☒ Bunkers 1000 tons ☐ Water..... tons

CARGO DATA

CARGO (TONS) FOR DISCHARGE AT: Balboa	Cristobal	Cargo on board after departing Canal Zone (tons)	Type of cargo	Deck load (Type and tonnage)
		25,161,1	Scrap	NO

EXPLOSIVES/INFLAMMABLES IN CARGO: Type	Quantity (tons)	Where stowed	Port of embarkation
	Nil		

The explosives/inflammables were stowed and packed in accordance with certificate of loading. Number	Date	Place	Issued at
	Nil		

PETROLEUM PRODUCTS: Type	Grade	Reid Vapor Press. or Flashpoint	Gas Free?	If not, grade & type last carried	How gas freed
			Nil		

CREW & PASS. DATA

Certified for passengers (number)	PASSENGERS ON BOARD (Total)	Transit	DISEMBARKING: Balboa	Cristobal	SHIP'S PERSONNEL ON BOARD (Total)	Officers	Crew	Stowaways
Nil	Nil	Nil			30	10	20	Nil

IMMUNITY STATUS: (Smallpox Vaccination Certificates over 3 years old are not valid)

Number of persons not in possession of valid Smallpox Vaccination Certificates: Crew	Passengers	Number of persons vaccinated by Boarding Officer: Crew	Passengers	Number of persons held on board
0	0	0	0	NONE

HEALTH QUESTIONS: (If more than 4 weeks have elapsed since the voyage began, it will suffice to give particulars for the last 4 weeks.)	Yes	No
1. Has there been on board during the voyage any case or suspected case of plague, cholera, yellow fever, smallpox, typhus or relapsing fever? (Give particulars in the schedule.)		X

QUARANTINE DATA

2. Has plague occurred or been suspected among the rats or mice on board during the voyage or has there been an abnormal mortality among them?		X
3. Has any person died on board during the voyage otherwise than as a result of accident? (Give particulars in schedule.)		X
4. Is there on board or has there been during the voyage any case of disease which you suspect to be of an infectious nature? (Give particulars in schedule.)		X
5. Is there any sick person on board now? (Give particulars in schedule)		X
6. Are you aware of any other condition on board which may lead to infection or the spread of disease?		X

NOTE.—In the absence of a surgeon, the master should regard the following symptoms as grounds for suspecting the existence of disease of an infectious nature: Fever accompanied by prostration or persisting for several days, or attended with glandular swelling, or any acute skin rash or eruption with or without fever, severe diarrhea with symptoms of collapse, jaundice accompanied by fever.

SCHEDULE TO THE DECLARATION

Particulars of every case of illness or death occurring on board, and dead bodies on board

† Recovered, still ill, died ‡ On board; landed at (name of port); buried at sea

Name	Class/ Rating	Age	Sex	Nationality	Port of Embarkation	Date of Embarkation	Nature of Illness	Date of its onset	Results of Illness †	Disposal of case ‡
				NIL.						

DERATTING RECORD	Date last deratted	Date of last exemption from deratting	Where	Origin of meat in ship's stores
		15 July 1969	New York	Europe

VET. DATA

NUMBER, KIND AND ORIGIN OF ANIMALS ON BOARD

NIL

NUMBER AND KIND FOR LOCAL DISCHARGE

I HEREBY CERTIFY THAT the foregoing statements and answers to all questions are true to the best of my knowledge and belief, that the list of all live animals now on board my vessel is complete; and that I acknowledge receipt of instructions regarding quarantine requirements, Sea Stores—Meats and Garbage, the landing of passengers and/or members of the crew, and the discharge of cargo.

Signature of ship's surgeon: NONE

Name typed or printed:

Signature of ship's master:

Name typed or printed: MICHAIL SARRIS

☐ NSQI ☒ SQI ☐ Veterinary inspection required ☐ Hatches will remain closed, & cargo discharge operation delayed until authorized by Sanitation Inspector.

PRATIQUE GRANTED: Free ☒ Provisional ☐ Detained for quarantine: Reason

Reason for provisional pratique: ☐ Smallpox vaccination held on board ☒ Restricted meat ☐ Animals held on board ☒ Invalid derat ☐ Illness or death on board

☒ Hatch required	☐ Applied	☐ Ship's sanitation	REMARKS:
☐ Spraying required	☐ Certificate	☐ By I.O. in bay	
☒ Advised re garbage	☐ Discharge RA/RH cargo		Subscribed and sworn to in my presence on boarded vessel, vessel cleared
☐ Sanitation inspection	☒ Derat inspection	☐ Balboa ☒ Cristobal	
☒ M.T.C. notified by radio	☐ Sanitation notified	☒ CdC notified	Balboa/Cristobal, C.Z. Boarding Officer

MTC and then to ship's file

32-5 x x x

Exhibit 38

J 370a

Exhibit 34

(Ship's Position Report, January 21)

18.50N

110.26

Speed 13.99

Revolutions 120.3

Tons 34

Bunkers on board 800

Wind - NW 3

Smooth Sea

Arrive 7th

5990 - miles to go

34

J 371a

Exhibit 35

(Ship's Position Report, January 28)

Record 2/4/41

[illegible] 1520[illegible] 13.80 120.0 35.0 554 SW3 SMOOTH ARR8 3640

2641N 15204 13.80 120.0 35.0 554 SW3 ARR8 3640

3 840AJET

L N. = 27th

26 - 41N

152 - 04 W

13.88 speed

120 revolutions

35 tons

554 bunkers on board

SW3 - wind

Smooth - sea

Arr. Feb. 8

3640 - remaining distance

J 372a

Exhibit 36

(Ship's Position Report, February 2)

LN = 3rd

31 - 48N

171 - 58W

12.96 speed

118.6 revolutions

35 tons

344 on board

Arrive 8th at 2000

1670 - miles to go.

36

Exhibit 37 (Excerpts)

(Deposition of Michael Gregos)

Q In what nationality?

A Greek nationality.

Q Did you, at one time, serve on the ANTONIOS DEMADES?

A Yes, I did.

Q What was your position on that ship?

A Second officer.

Q For, approximately, how long did you serve on that ship?

A A year.

Q Did you make her last voyage? Were you onboard on her last voyage?

A Yes.

Q Where did that voyage start?

A From New York to Japan.

Q How many ports did you load at?

A Twoports.

Q Which ones were they?

A New York and Boston.

Q Which was first?

A New York.

Q What did you load?

A Scrap iron.

Q That was the entire cargo at New York and Boston?

A Yes.

37-1

Q Can you tell us, briefly, what this ship looked like?

A What do you mean?

Q Would you describe the ship?

A The ship was a cargo ship, 24,000 tons, built-in Yugoslavia in 1963.

Q How many hatches did she have?

A Seven hatches.

Q Where were they located with respect to the bridge?

A Three in front of the middle of accommodation and four after the accommodation.

Q Three forward and four aft?

A Yes.

Q All more or less about the same size?

MR. O'REGAN: Objection.

Q Were they all the same size?

A No.

Q Were you onboard during the loading?

A Yes.

Q What kind of hatch covers did this ship have?

A McGregor.

Q Were the hatches covered when the ship left Boston?

A Yes, they were covered.

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Q Can you describe how they were covered? and how the hatch covers were secured?

What type of hatch cover is this? Is there a name for it?

A No, I don't know.

Q Would it be a McGregor type hatch?

A Yes, McGregor type.

Q Can you tell us how the hatch cover is put in place and secured?

A We put cable through the first section, and go to the block, which is in the front in each hold, hatch, and with the help of the winch we move those sections and put them in place, and after we put them in place we turn those rollers.

Q Rollers?

A Rollers, 180 degrees.

Q What does that do?

A Get the sections attached.

Q With the coaming?

A With the coaming. Then we put screws and the wires on the sections and tighten those screws.

Q How do you tighten these screws; with your hands or with a wrench?

A With a wrench.

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Exhibit 37

Q Is that the way all these hatches were covered and fastened down when you left Boston?

A Yes.

Q At that same time, what was the general condition of the ship?

A It was in good condition.

Q Did you have a full crew and all your equipment working in proper order?

MR. O'REGAN: Objection, leading.

Q Did you have a full crew?

A A full crew.

Q Was the radar and the compass working and the radio, all the equipment?

A Yes, working properly.

Q After leaving Boston, did you run into heavy weather?

A We hit a gale by Nantucket Island.

Q Did you take water over the deck, at that time?

A Yes.

Q Were soundings regularly taken in the bilges of this ship when she is underway? Did they regularly sound the bilges?

A Yes, they're supposed to do it.

Q Who does that?

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A The engineers.

Q The bosun does not do any soundings?

A No.

Q The engineers do that?

A Yes.

Q Did any water come in any of the bilges after that storm or during that storm?

A Which storm?

Q Nantucket.

A I don't know.

Q Were any soundings reported to you?

A I don't know.

Q You don't know of any soundings?

A No.

Q What watch did you stand while this ship was underway?

A 12:00 to 4:00.

Q Two watches a day?

A Yes. Midnight and in the afternoon.

Q After leaving Boston, what was the next place the ship went to?

A Panama Canal.

Q Were any of the hatches opened while you were going through the Canal or, as a matter of fact, at any time?

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A No.

Q What did you do at Panama?

A Take bunkers.

Q Did the ship suffer any damage going through the Canal? Was it still in the same condition as when you left Boston?

A The same condition.

Q Where did you head for after you left the Canal?

A For Japan.

Q On that trip, did you run into some more bad weather?

A Not before the dateline.

Q Not before the international date line?

A Right.

Q Was there any report of water in the ship or in the bilges at any time up to the date line?

A No.

Q Now, did you run into a storm after you crossed the date line?

A Yes, after two, three days.

Q Do you remember the approximate date when this storm first appeared?

A Sixth of February.

Q That is 1970?

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A '70.

Q When did you first observe the storm?

A When I went to the bridge.

Q Was this at midnight or the middle of the day?

A The middle of the day was the worst part.

Q When did the storm start? When was the first watch you stood when there was a storm?

A About 6:00 o'clock or 7:00 o'clock in the morning, February 6th.

Q On February 6th you had the midnight to 4:00 a.m. watch. Did the storm start to develop then?

A About then on my watch it started.

Q Did the captain give you any instructions with respect to the speed of the ship during that watch?

A He reduced the speed to 90 revolutions per minute.

Q That was on the midnight to 4:00 watch?

A The storm started about 6:00 o'clock, 7:00 o'clock in the morning. I was done with my midnight watch. When I went to the bridge by 12:00 o'clock noon I saw the revolutions per minute were 90 revolutions per minute.

Q Then did you return to the bridge for the 12:00 to 4:00 watch starting at noontime that day?

A Yes.

Q Was that the day when something unusual happened up

37-7

forward on the ship? Was it during that watch?

A Yes.

Q What was the weather like on that watch, that second one, starting in the middle of the day? What was the weather like?

A It was bad weather. About 10--

MR. O'REGAN: What day are we talking about? Is the 6th of February?

THE WITNESS: Yes.

Q It was 10 on the Beaufort scale?

A Yes.

Q Where was the wind and the waves coming from with respect to the ship?

A From the ahead.

Q From ahead?

A Yes.

Q Generally, what was your course?

A 278.

Q Were the waves, at that time, breaking over the deck?

A Yes.

Q During that watch, during the middle of the day, did something unusual happen up forward?

A By 2:00 o'clock I saw big waves coming, about 25,

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30 feet high. It was about 2:00 o'clock in the afternoon. [illegible] cover the front part of the ship. After all this water came over the deck, I saw colored water.

Q Let me go back. You said you saw big waves. Do you mean that these were big like all the others or bigger?

A Bigger.

Q Could you estimate how much bigger these waves were?

A If the others were about 15, those were about 25, 30 feet.

Q Almost twice as high as the other waves?

A Yes.

Q What part of the ship did you see the colored water?

A In the front part. The front of the bridge.

Q What did you do?

A The captain was on the bridge at the time, and I said to him that something happened in one of the holds. We went together to the left wing, and we saw No. 1 hatch open--we saw about two sections--I mean, two sections were missing. That's all we can see from the bridge.

Q But you could see they were missing from No. hatch?

A From No. 1 hatch.

Q What speed was the ship making at this time?

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A About 80 or 85 revolutions per minute.

Q Is 80 to 85, half, three-quarters, full? What is it?

A Full speed is 122 revolutions.

Q Did you go forward or did you stay on the bridge?

A I stay on the bridge.

Q Did the captain give any orders with respect to the course of the ship?

A He turned the ship 180 degrees around.

Q Then what did he do after that?

A We called the deck crew and some of the engineers and the chief officer and captain and bosun, and they went in the No. 1 hatch.

Q They went forward?

A They went forward.

Q Did you go?

A No. I stayed on the bridge.

Q How long were they gone?

A They stay there about a couple of hours, one or two hours.

Q When they came back, did they tell you what they had seen?

A The captain told me that No. 1 hatch is open and three sections were in place and the others were off-set.

Q When you say "in place", do you mean--

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A Moving backward to the mast house.

Q What I am trying to get at is, did he say that some of the sections were still in place covering the hatch?

A Yes.

Q Where were the other sections?

A The other sections were under the mast house.

Q What was their condition?

A They say it was bended.

Q This is what he told you?

A Yes.

Q Could you see this from the bridge?

A No, I couldn't.

Q Could you see whether or not the No. 1 hold was filled with water?

A No, I couldn't see, but the captain say it's full of water.

Q What was done after that?

A We keep very slow speed, about 30 revolutions or 50 revolutions, and the captain tried to figure how much fuel we have onboard, and if we can continue our voyage to Japan.

Q So then what did he decide to do?

A He decided to turn and continue our voyage.

Q Did you spend another watch after that?

37-11

A From that time I stay until the next day in the morning.

Q When the hatch cover was stowed in, that was in the middle of the day. Then your next watch would be midnight again?

A Yes.

Q Did you stand that watch?

A Yes.

Q What was the ship doing?

A It was listing starboard.

Q Do you remember how much?

A About 12:00 o'clock it was about five or six degrees.

Q Did that list increase during your four hour watch?

A Yes.

Q Which direction was the ship heading on this second night that we are talking about now?

What direction was the ship going? Was it going towards Japan or away?

A Towards Japan.

Q Was it still stormy?

A Yes.

Q You stood that entire watch?

A Yes.

Q What was the condition of the ship the next morning?

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A It was very bad condition.

Q Did the captain decide to do anything?

A He decided to send S.O.S. message.

Q Did he do that?

A Yes. We send about 4:00 o'clock in the morning.

Q That was about 4:00 o'clock in the morning?

A Yes.

Q Did anybody show up?

A You mean any ship?

Q Yes.

A Yes. That radio operator say about three, four ships around in our area, and we give our positions, and he say after a little while that ships are coming for help.

Q Did you see any of these ships show up while you were aboard?

A We have the radio on all night, and we get one ship by 7:00 o'clock in the morning about 17 miles away from us, and that's all.

Q The radio operator was in touch with him?

A Yes.

Q Did there come a time when the captain gave the order to abandon ship?

A No, we didn't see the ship.

Q I said, did there come a time when your captain

37-13

Q How was this cargo loaded onboard.

A With the conveyor from the shore.

Q Was it loaded in any kind of bundles or was it put in loose?

A They had conveyor from the shore and just put into the hold.

Q The turnings went in loose, is that correct?

A Yes.

Q Do you know whether any duplicate records of the loading are submitted to your office before the vessel sails from, let's say, the ports of New York and Boston?

A No.

Q You don't know?

A No, I don't know.

Q Was any cargo stowed in the top side tanks of the vessel?

A No.

Q Just in the holds?

A Just in the holds.

MR. O'REGAN: Off the record.

(Discussion off the record.)

Q Mr. Gregos, I show you a manual entitled Loading Manual. Have you ever seen that document or one like it before?

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STENOTYPE AND SHORTHAND REPORTERS

A Yes.

Q Was this the loading manual which you had onboard the ANTONIOS DEMADES before she sailed from New York and Boston?

A Yes.

Q That would be a duplicate of the one which was used aboard the ship, is that correct?

A Yes.

MR. O'REGAN: Please mark this Plaintiff's Exhibit No. 3.

(Above described loading manual was marked Plaintiff's Exhibit No. 3 for identification.)

Q Do you know what documents are used onboard the ship to calculate dead weight and displacement?

A They have certain tables.

Q What tables are these?

A I can't remember now.

Q Did you have any responsibility for checking the draft of your vessel before you sailed?

A Yes.

Q Is that one of your responsibilities?

A Yes, it was my responsibility. Also chief officer and the captain.

Q Did the vessel have any regulations onboard or in-

Q Did she take on bunkers in New York, if you know?

A No, I don t remember. I don't remember.

Q Do you know whether she had any water ballast upon arrival in New York?

A Yes.

Q She did?

A Yes.

Q Where was the water ballast on the vessel?

A Double bottom tanks under the hold. Under each hold there is a tank for ballast and No. 1 is for bunkers.

MR. O'REGAN: May we have the capacity plan and the general arrangements plan?

MR. ALLEN: I don't think I have everything.

Q Mr. Gregos, I show you a plan entitled Capacity Plan Drawing, No. CM 153, dated 10/4/67, and ask you is that the capacity plan for the ANTONIOS DEMADES?

A Yes.

MR. O'REGAN: Please mark this as Plaintiff's Exhibit No. 4.

(The above described Capacity Plan was marked Plaintiff's Exhibit No. 4 for identification.)

A When they built those ten ships, the first were for 24,000 long tons, and then they get extension and they take 2,000 more, they inspect those ships, and they give more long

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Exhibit 37

tons.

Q You said when they built these ten ships. Is this one of ten ships of the same type?

A Yes.

Q Are the other nine ships owned by Livanos also?

A Yes.

Q Do you know what the names of those are?

A I know.

Q Would you tell us.

A I don't know exactly which one was the first one, but I remember the names. It's EVOROS, ANTONIOS DEMADES, ATLANTIC EANGILE, MEANDROS, THEOFANOS. I don't remember how many I got there.

MR. ALLEN: Off the record.

(Discussion off the record.)

MR. O'REGAN: Would you find out the other names, Mr. Allen, and provide them in the space that will be left in the record for it?

MR. ALLEN: Sure.

Q Mr. Gregos, these other nine ships, besides the ANTONIOS DEMADES, are they all equipped with the same

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Exhibit 37

McGregor type hatch covers?

A Yes.

Q Going back to your earlier vessels that you served on, one of which was the EVOROS, did you ever make a voyage on the EVOROS to Japan?

A Yes.

Q Did you make a voyage on the ATLANTIC SUNRISE or on the ATLANTIC SUNLIGHT to Japan?

A Yes.

Q Similar to this voyage as you did on the ANTONIOS DEMADES?

A Yes.

Q Was the ATLANTIC SUNRISE and the ATLANTIC SUNLIGHT also vessels equipped with McGregor type hatch covers?

A Yes. Different type, but they call them McGregor.

Q McGregor has a number of different types?

A Different types, yes.

Q At least, on the EVOROS and the ANTONIOS DEMADES, they are the same type of McGregor, right?

A Yes.

Q During your voyages on these other vessels, did you ever encounter heavy weather?

A Yes.

Q Did you ever encounter weather similar to the

37-18

weather you enccuntered on this voyage on the ANTONIOS DEMADES?

A I think so, yes.

Q On those voyages, did there ever come a time when any of the McGregor hatch covers came up, as you testified they did, at least, two portions of the No. 1 McGregor hatch cover did on the ANTONIOS DEMADES? Did this ever happen on any of the other ships that you were on?

A No.

Q Looking at the capacity plan, which is now Plaintiff's Exhibit No. 4, we were talking about water ballast. Would you tell us whether there was water ballast on the vessel when she sailed from Boston on this voyage?

A There was no ballast.

Q There was none?

A No.

Q You said there was water ballast before arriving in New York?

A Before New York.

Q Did you discharge that ballast?

A Yes.

Q All of it?

A Yes.

Q Would any records be kept of this? Would it be

37-19

logged?

A The surveyor checks the water ballast with the chief officer.

Q Would you or the company have any records indicating whether or not the vessel had water ballast or did not have water ballast upon departing from New York?

A No, I don't.

Q You don't know?

A I don't know.

Q Would you tell us when the vessel sailed from Boston where the bunkers were stowed?

A I don't know. We didn't have too much bunkers when we leave from Boston. I don't know where they have it.

Q You did not have too much?

A No. Just enough to arrive in Panama.

Q Did you take on any bunkers between Boston and Panama?

A No.

Q Did you take on bunkers in Panama?

A Yes.

Q Do you know how much?

A We take full bunkers so we can arrive--for 24 hours.

Q You say full bunkers. Do you know how much you took?

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A I do not remember how much is the consumption of the engine, but I remember we took ballast enough to arrive in Japan, maybe, 750 tons. I think the consumption of this engine was 30.5 for 24 hours.

Q Where do you get that figure of 30.5 from?

A I hear from engineers, and every new engineer bring a statement to the captain where he write down into the log book how many tons we have remaining onboard, fuel, and how many tons the engine burn for 24 hours, because, sometimes, if we have bad weather the engine burns more fuel.

Q Are these slips that you talk about turned into your office at any time?

A The chief engineer takes those reports to the bridge, and we give every known position--the bridge give a slip to the engine what is the position and how many miles were on this past 24 hours, what the speed limit is.

Q Is this information recorded any place else? Is it logged or is there a report sent to your owners? Is there any other record?

A I don't remember exactly, but every Tuesday the captain give telegram to the office to New York. Especially when the ship is time charter, we give telegram to the charterer everyday or, at least, every week, how many bunkers

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we have onboard, and what is the consumption and what is the average speed limit.

Q Was that done on this voyage?

A Not everyday. We send a message every week, every Tuesday.

Q Every Tuesday?

A Yes.

MR. O'REGAN: Could we have these messages that Mr. Gregos just referred to produced for this voyage?

MR. ALLEN: If they're available. I think I should state, on this record, that this is about the fourth set of requests for documentation, and I already implored with representatives of your office to please get to one final request, so that we don't keep doing this for the rest of our lives.

MR. O'REGAN: I'll try to make the request reasonable, and, of course, these are items--

MR. ALLEN: We have had three sets of requests already.

MR. O'REGAN: I can appreciate that. What I would like to say though is that some of these requests that I will be making will be, perhaps coming out and developed today as a result of an examination of this witness, and I trust that you will produce them.

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Exhibit 37

Is that the overhead view of the general arrangement plan for the ANTONIOS DEMADES?

A This is a top view.

MR. O'REGAN: Mark this Plaintiff's Exhibit No. 7.

(The above described document was marked Plaintiff's Exhibit No. 7 for identification.)

Q Referring to Plaintiff's Exhibit No. 4, the Capacity Plan, do you know whether that plan or one similar to it was onboard the ANTONIOS DEMADES before she sailed from Boston?

A Yes, we have that.

Q One like this?

A Yes.

Q Did you have plans like Plaintiff's Exhibits No. 5 and No. 7 onboard?

A Yes.

Q That is, before leaving Boston?

A Yes, we have.

Q You were onboard this vessel about a year before this incident, correct?

A Yes.

Q Did you ever make a run from Boston through the Canal to Japan on the ANTONIOS DEMADES before this occasion?

A Yes, we have. Not from Boston. From the East Coast.

37-23

Q From the East Coast?

A But not Boston.

Q By the Panama Canal?

A Yes.

Q Did you ever carry cargo like you carried on this occasion, the same type of cargo?

A Yes. Scrap iron, like from the cars, stuff like this. If I remember, the voyage from the last voyage we have the same--I don't remember exactly from New York or Baltimore, but we load scrap iron to Japan.

Q That is one voyage you're talking about. Were there any other voyages which you made aboard the ANTONIOS DEMADES besides that one and the one where she sank?

A Yes.

Q There were others?

A Yes.

MR. ALLEN: Wait a minute. He has admitted that he was on the ship a year. Are you asking about scrap voyages? That wasn't in your question.

MR. O'REGAN: I meant it to be.

MR. ALLEN: You better change that.

Q My questions are now directed to voyages you made on the ANTONIOS DEMADES before the voyage on which she sank, and on which voyages the vessel carried scrap iron or ore.

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Q No.

A Which company?

Q Livanos.

A For what?

Q Did you make any report to Livanos regarding the sinking?

A No. I only make this one (indicating).

MR. O'REGAN: Indicating Exhibit A.

Q Referring to the McGregor hatch cover on No. 1 hold, and referring you now to Plaintiff's Exhibit No. 7, the Capacity Plan looking from above, how many sections are indicated for that cover?

A Five.

Q How many are indicated on Exhibit No. 4?

A There is another view.

Q When you reported onboard this ship, how many sections were in that hatch cover; four or five?

MR. ALLEN: If you remember.

A I don't remember.

Q Do you recall whether the hatch cover was ever modified or changed from the time you reported onboard until the vessel sank?

A No.

Q You don't recall or it was not?

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A No, I don't remember.

Q You testified that the hatch cover has bolts along the sides of it, is that correct?

A Yes.

Q How many bolts are there for each section?

A There are three studs on this side (indicating) and three on the other side.

Q Three on the port side and three on the starboard side?

A For the first one and the last one there are bolts here (indicating).

Q You are indicating the forward section of the cover and the after section of the cover?

A Yes. The first section and the last section there are bolts here (indicating), but on the other two, there are only three on each side, three bolts on each side.

Q Three bolts on the port side for one section and three bolts on the starboard side for one section?

A Yes.

Q And then bolts running across the vessel in the forward part of the hatch cover and across the after part of the hatch cover?

A Yes.

Q How many bolts run across the front and the back of

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A No.

Q I refer you to Page 4 of your statement.

MR. ALLEN: Off the record.

(Discussion off the record.)

Q I refer you to Page 4 of your statement, the last sentence of the first full paragraph. You indicate, do you not, that the engine speed was reduced when you were in that gale?

A I don't remember. Maybe. You see, now it's three years. I can't remember. This was an accident I shouldn't remember. If we reduce the speed when we have a gale in Nantucket Island, I remember, at that time, when I make the statement.

Q When you made the statement it was fresher in your mind?

A Yes.

Q Do you remember today what speed your vessel was reduced to when you hit that gale off Nantucket?

A No, I don't.

Q Now, let's go to the day of February 6, 1970. In your statement on Page 5 you indicate that during your mid-watch, that would be from 0000 to 0400 the morning of the 6th the captain ordered you to reduce revolutions to about 90 to 95 rpms?

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A Yes.

Q I believe earlier today you testified that you went to 90 rpms at 12:00 noon. Which would be more of an accurate statement, that which is contained in your statement or your testimony today?

A Can I look at my statement?

Q Sure.

A My statement is correct.

Q At that time you were on a course of 278 degrees true?

A Yes.

Q You also indicated that you checked the barometer in the chart room and it indicated falling down, and you recall some low pressure at about 45 degrees north, 158 degrees east was moving towards northeasterly direction?

A Yes.

Q Where did you get that information from?

A We get reports from the weather stations from Japan and San Francisco.

Q While at sea?

A Yes.

Q Do you ever get any weather routing information before you set sail on a voyage?

A What do you mean?

Exhibit 37

A Why?

Q Why did you go from course to 278 to course 098?

A Because if we stay on that 278 nobody can go up the front and check what was the trouble, what really happened.

Q When they went up forward the waves were then striking, I believe, off the port quarter rather than on the bow, is that correct?

A Yes. We turned around 180 degrees.

Q And they were up there for about an hour or so?

A Yes.

Q When did the vessel then return to course 278?

A I don't remember exactly. After a couple of hours.

Q You indicate in your written statement, on the bottom of Page 8, continuing over to Page 9, "At about 1700 hours I felt the ship was turning back to the original course, 278 degrees true."

A Yes.

Q That would mean, would it not, that the vessel was on a course of 098 degrees for about three hours?

A Yes.

Q During the three hours that the vessel was on that course, was she riding any easier than on the course of 278 degrees?

A Yes, it was a little bit easier.

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other holds besides No. 1?

A No, I don't know.

Q You don't know?

A No.

Q You noticed that sections No. 4 and No. 5 were not in place.

MR. ALLEN: I'll object. I think he said he saw an opening in the forward part of the No. 1 hatch. I rather have it identified that way.

MR. O'REGAN: He didn't say the forward part of No. 1.

MR. ALLEN: I thought he did.

THE WITNESS: The forward.

Q The forward part of No. 1 hatch?

A Yes. There was an opening in the forward part of No. 1 hatch. When I went to the bridge I seen an opening from here to the forward. I mentioned in the statement the captain told me about this. I didn't see it.

Q The captain told you that sections No. 4 and No. 5 were not in place?

A Yes.

Q You yourself saw that there was an opening in the forward section of the hatch as well?

A Yes.

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A I don't.

Q You testified before that you tried to save the seaman's books. What are those seaman's books, exactly?

A It's like a passport.

Q When you looked forward and saw the colored water, from that time until the time the vessel sank, did you notice any damage to the ship?

A No.

Q When you looked forward--

A You mean in the other hatch opening?

Q Yes.

A No, I didn't.

Q When you looked forward in the area of No.1hatch, did you see any of the deck ripped or any of the stanchions bent or was the mast in the area damaged?

A No. Captain told me that.

Q I'm asking you what you saw. Did you see anything?

A No.

Q You testified on direct examination that at one time the speed was reduced to between 30 and 50 rpms. Now, when was the speed reduced to between 30 and 50 rpms?

A When we turn around to 90 degree course.

Q Do you mean to 98?

A Around there, 90 or 95. We like to have the wind

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Q And loaded as you were on this occasion?

A Yes.

Q What speed would you make doing 80 rpms?

A About no more than three or four miles an hour, because I can't tell, because we can't get any position by the sun or stars, because it was cloudy.

Q What speed would you make after 50 rpms?

A Fifty rpms with good weather?

Q Assuming no wind and no current.

A Six and a half miles.

Q Eighty rpms, what speed would you make?

A With calm, no winds?

Q Calm sea, right. Loaded as you were on this occasion.

A About 11 knots. Ten, 11 knots. There is a table in reference to rpms, and they say with 110 rpms, for instance, the ship is going 11, 12, 13 knots, I don't remember, but there is a table which shows you how many knots you go at a certain amount of rpms.

Q You indicated in your direct testimony that when the captain came back from the area of No. 1 hatch, he tried to figure the amount of fuel onboard?

A Yes.

Q Who did he do this with? Did he do it by himself

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or with the chief engineer?

A The chief engineer gave him a report.

Q Do you know what that report consisted of?

A Everyday the chief engineer knows how much oil we have onboard. Like I told you before, every afternoon we give ship's position with the speed and with weather condition, and we get record from the engine, how many miles, according to rpms, which is different than one would get from the stars or from the sun. Sometimes the engineer gives us that according to his speed revolution; the ship must be 15 or 16 knots, but actually the ship doesn't because there are currents or different things that go against the speed of the ship.

Q At the time the captain tried to figure out the amount of fuel onboard, to see whether he could continue the voyage to Japan, this is after he returned from looking in the area of No. 1 hatch, did he discuss this with the chief officer?

A What?

Q The amount of fuel onboard?

A Sure, but I wasn't present at the time.

Q How do you know that the captain tried to figure out the amount of fuel onboard?

A I saw him working in the chart room and figuring

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out how many miles we have to go and how many days remain.

Q Was he by himself when he was doing this?

A Yes.

Q The chief engineer was not there, at the time?

A No. He came later. The chief engineer came to the bridge later, and they discussed, but I wasn't present.

Q You don't know what they said?

A No. The only thing I can say, we continued our trip towards Japan.

Q At the time the captain made this calculation, do you recall how much fuel was remaining onboard?

A No, I don't.

Q Referring to the Capacity Plan, could you tell us whether any sort of protection was in the cargo holds? I'm now referring to the forward and after bulkheads of the holds.

Was there anything there protecting those bulkheads before the vessel left Boston?

A What do you mean by protecting?

Q Was there anything separating the bulkheads from the cargo?

A No.

Q Any sheathing of any sort?

A Each hold is separate from the other.

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circle I will draw a line from it and call it B.

Do you know whether those vents were operating properly before the vessel left Boston?

A We have them closed and tied with a rope. Also there is a handle switch where you can close or open those ventilators.

Q Do you know whether they were open or closed before the vessel left Boston?

A I don't know. It wasn't my job.

Q Whose job is that?

A It was the chief officer and bosun.

Q Do you know whether they had canvas coverings on them before the vessel left?

A They were covered.

Q Did you see them covered with canvas yourself?

A Yes.

Q Do you know what cowl vents are?

A No.

Q You don't?

A No.

MR. O'REGAN: Off the record.

(Discussion off the record.)

MR. ALLEN: We will stipulate he is testifying that they had no cowl type ventilators.

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Q Again referring to Exhibit No. 5, would you tell us where the vents were for any other vents for No. 2, and where the vents were for No. 3 hold?

A These are regular ventilators too on top of the mast (indicating). Over here there are ventilators too (indicating).

Q Let's label that C.

A And there are ventilators here for No. 3 (indicating). This is for No. 3.

Q That is at the top of this mast, the second mast?

A Yes.

Q You testified that the vessel developed a gradual list to starboard, correct?

A Yes.

Q Did she also, during this period that she was listing, gradually go down by the head?

A Yes. By the head and to starboard.

Q During your service with Livanos on the other vessels besides the ANTONIOS DEMADES, did those vessels ever carry cargo such as this, scrap iron or iron ore?

A Yes.

Q Were those vessels also loaded in all the holds?

A I don't know. I don't remember. You see, this kind of ship was specially made. You can load the ship and

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A They were in the proper position for long trip.

Q What is that?

A The booms go down and are secured.

Q Did you notice any damage sustained to any of the booms before the vessel sank?

A Before the vessel sank?

Q Yes.

A I don't remember.

Q On the 6th and on the 7th of February, what were the seas like? I'm now asking you in connection with what direction they were coming from.

A From westerly.

Q You did not notice any cross seas? The sea was coming from the same direction, is that correct?

A I mean, maybe you see a wave coming from 260 degrees and the other wave may come from 290 or 285.

Q But generally from a westerly direction?

A Yes. Between 60 and 90 degrees.

Q The chief engineer, I understand, was Nicholas Paravalos?

A Correct.

Q Do you know whether he is still in the employ of Livanos?

A I don't.

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J 410a

Yokohama, Japan
February 14, 1970

Exhibit 38

(Statement of Mikes (Michael) Gregos)

STATEMENT OF 2ND OFFICER GREGOS MIKES
EX M.V. "ANTONIOS DEMADES"

Name:	Gregos Mikes
Address:	Mitrodorou 19, Chios, Greece
Nationality:	Greek
Date of Birth:	April 25, 1943
License:	2nd Officer, Greek Certificate No. 9633
Date and Place I Joined:	Osaka, Japan on January 7, 1969

I graduated from Chios High School in 1961 and went to sea as an apprentice officer for 4 years. After that I passed the examination and got a 3rd Mate's license from the Greek Government and I acquired a 2nd Mate's license from the Government in May, 1966. I have served on ocean-going vessels for about 5 years and 2 months.

I joined the Liberian flag freighter M.V. "ANTONIOS DEMADES" in Osaka, Japan on January 7, 1969. -- The vessel has been owned and operated by Anthony Shipping Co., Ltd. of Monrovia, Liberia. At that time the vessel was in Hitachi Childo Dockyard for annual survey. After my joining, there has been no repairs outstanding and the vessel has traded in Atlantic and Pacific including Australia route.

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Exhibit 38

The M.V. "ANTONIOS DEMADES" of 15,977 gross tons and 26,135 deadweight tons was built in Yugoslavia in December 1963 and is a "Y" type bulk carrier. She is 628'-2" in length and 75'-3" in breadth with bridge amidships and engine aft (Fiat D7583, cylinder 11,000 BHP). The vessel has 7 holds, 3 on the forward of the bridge and 4 after the bridge (see Exhibit 1 - Motor Vessels Bulk Carriers "Y" Type). All the hatch covers are of steel mackgregor type hatches. As to the size of respective hatch covers, please refer to Exhibit 2 - Hatch Way and Derricks. The No. 1 hatch cover of the vessel consists of 5 sections, each of which is 26'-11-5/8" athwart and about 5' forward and aft with weight of about 5 tons. Thickness of the cover is about 11 milimeters.

Each hatch cover is opened and closed by winches and derricks. For example when the No. 1 hatch cover is to be opened, all the sections of the cover are pulled backward by winches using wire ropes through derricks and folded down and stored into the storage place under the No. 1 masthouse. When it is closed, after confirming all the sections being properly located, the stool wedges are located on the joint between sections and securing bolts on all the sides of the cover. This is done by hands of crewmembers under guidance of the Chief Officer and the Boatswain.

38-2

Exhibit 38

As for safety equipment, the vessel has two life boats on both sides of the after accommodation and two life rafts, one is located on the bridge midship house and the other in the after house. We also have one dyngy (small boat) on the after accommodation.

On this voyage the vessel loaded iron scrap both in New York and Boston. (I do not know the correct name of the charterers and terms of the charter.) The vessel in ballast arrived at New York from Baltimore on about 18th December and all the holds and hatch covers were inspected by the cargo surveyors, to which the chief officer also attended. All of them were accepted by the surveyor to his satisfaction. Thereafter loading was commenced on 22nd and completed on 27th. In New York about 4,000 L/T of various types of steel scrap was taken into Nos. 3, 4 & 5 holds. I do not recall the exact quantity of each hold as no figures are available. Then the vessel proceeded to Boston on 28th and about 20,000 L/T of various types of scrap was loaded into all the holds. Onto the No. 1 hold, small type of scrap was loaded and there was some space between the top of the cargo and the main deck level, but I cannot state the height of space in terms of figure. When the cargo loading was completed the hatch

38-3

covers were closed in tight and secured by steel wedges and bolts as mentioned previously.

At 0530 hours on 6th January the vessel under the command of Captain Michael Sarris left Boston bound for Japan via Panama Canal. The sailing draft was almost even keel of 35' (in my recollection, it might be 4 or 5 inches by the stern). The vessel thence proceeded to Panama Canal at a full speed of about 15 knots (122 revolutions). One or one and half days after departure from Boston, the vessel encountered a rough sea for about one day, while she was sailing off from Naducket to Cape Hatteras or more south of it. At that time there was southwesterly gale of about 50 miles per hour and sea was very rough. The engine speed was reduced during such period by the order of the Captain.

The vessel arrived at Panama Canal on the afternoon of 13th January and she took bunker at Cristbal until 0400 hours of 14th. Then she passed the canal on the day time of 14th.

After having passed the canal the vessel proceeded at a full sea speed on a rhump line to Japan passing the Hawaii Islands about 60 miles distant to port side and also passing the Midway about 60 miles to the port side. On those days, weather and sea were normal with rather high

38-4

temperature in tropical waters. After having passed the Midway, the vessel proceeded on a course of 278° (T) and passed the International Date Line on 1st February at the position of 30° Lat. and the date was then adjusted to 2nd February. I do not recall the exact time. The position was ascertained by the sun observations.

After passing the date line the weather was worsening and wind was blowing from a southwesterly direction with force of approximately 4-5 and sea was rough. The vessel continued proceeding then at a full speed of about 14 knots. At noon of 4th February, I could take my ship's position by the sun. In my recollection, it was about 31.5° N and 168° E (as the Log Book was lost, I do not have the exact figures). On the afternoon of 4th February a southwesterly wind with force of about 5 was blowing and sea was moderate and the weather was generally cloudy.

However at about 0200 hours on 6th in my watch (my watch at sea was every 12-4), wind was southwesterly to westerly with force of about 7, sea was rough with occasional showers and high waves were coming from the port side bow. The vessel was heavily pitching and rolling. At that time the Captain ordered me to reduce revolutions to about 90-95 RPM, half ahead speed, and to change the wheel from auto pilot to manual, which I did. The ship's course was maintained 278° (T).

38-5

ORIGINAL

Exhibit 38

I checked the barometer in the chart room. It indicated falling down but I don't recall the figure. I remember some low pressure at about 45° N and 158° E was moving towards northeasterly direction (I do not remember the figure in the center of the low pressure). The Chief Officer and the Boatswain, as a matter of routine job, inspected conditions of all the hatches every morning at about 8-8:30 when the weather permitted, however I understood that as the ship was pitching and rolling and the waves were pounding on the deck, it was impossible to inspect the hatch covers on the deck.

As I was on watch on the bridge from 1200-1600 hours on the same day, I went to the bridge at 1200 hours. At that time, the Captain was commanding the vessel because of rough sea and there were A/B Sailor Dalessio Dimitrious as lookout and A/B Sailor Sfendilakis Ioannis at wheel on the bridge. A westerly wind with force of about 9-10 was then blowing and large waves of about 25' high were coming both from westerly direction and southwesterly direction. The weather was cloudy accompanying occasional showers. The ship's course was still 278° (T) and the engine revolutions were about 80 RPM. The vessel was heavily pitching and rolling and sea water was falling on the deck.

At about 1400 hours the Captain, the A/B Sailor and I saw mountainous waves of about 30 feet high coming from both port and starboard bow direction onto the forward of the ship. Immediately after the waves had passed, we saw dirty brown colored water on the port side after of the No. 1 hatch. Surface of the water was then at the hatch cover level. I thought something happened in the forward. Then I went to the port wing of the bridge and I, holding the forward wind protection by hands, saw only Nos. 1, 2 & 3 sections of No. 1 hatch cover remaining in position but I could not see Nos. 4 & 5 sections. I immediately told the Captain "Come to the wing. The No. 1 hatch cover was opened." Then the Captain and the Lookout Sailor came to the port wing and also saw that the No. 1 hatch cover was open. The ship was pitching and rolling and sea water was coming in and out from the opening.

The Captain then ordered me wheel to a hard starboard and to follow the opposite course (90° True), which I did. (The engine was the same revolutions of 80° RPM.) At the same time he instructed me to call officers, the Boatswain and all deck crews there to the bridge. When they came to the bridge, the Captain told them (Chief & another

2nd Officers, Boatswain and all other deck crewmembers) that we had to go to the No. 1 hatch to examine what happened. I also telephoned to the engine room by order of the Captain that they should come to the bridge.

The Captain, Chief Officer, Boatswain and several crewmembers tied the life line around their bodies and went as far as the top of No. 1 masthouse passing on the No. 3 hatch cover, No. 2 masthouse and No. 2 hatch cover. The conditions of wind and sea were the same as before. Meantime the 3rd Engineer and one apprentice engineer came to the bridge and I told them to go to the forward. I remained on the bridge and kept on opposite course (98° True) as I was instructed. The vessel was then receiving waves from the port quarter.

I cannot be precise about time interval, but in my recollection, about 1-2 hours after they went, the Captain and other crewmembers came back to the bridge. The Captain told me that Nos. 4 & 5 sections were thrown down into the storing place, just aft No. 1 hold and they were badly twisted, that it was impossible to seal the hatch again and that the hold was flooded with water but there would be no imminent danger. At 1600 hours I was relieved by the Chief Officer and then I went down to my room. At about 1700 hours

ORIGINAL

I felt that the ship was turning back to the original course (278° True). At some occasions I went up to the bridge to see the weather and ship's conditions and I heard the conversation between the Captain and the Chief Officer about the weather and the ship's condition. I remember the sea condition was about the same and the vessel was heavily pitching and rolling.

At 0000 hours on 7th February, I went to the bridge for my watch. At that time the Captain, Chief Officer, another 2nd Officer, Lookoutman and Quartermaster were on the bridge. Wind was then westerly or WNW'ly with force of about 10 and large waves of about 30 feet high was coming from the same directions as the winds, accompanying occasional showers. The ship was heavily pitching and rolling as stated before but by consulting the clinometer I estimated the ship was listed about 6° to starboard. Thereafter the wind and sea remained almost in the same conditions.

The said listing further increased and at 0500 hours on 7th I noticed that the ship was listed about 10°-12° to starboard. The Captain told all of us on the bridge that the situation had turned out to be dangerous and he instructed the Radio Officer to send the international distress signals. At the same time he ordered all the crewmembers to standby

Exhibit 38

and the Chief Officer passed the said order to the engine department. The Captain estimated the ship's position by dead reckoning, the way of which I am not sure. The position was said [illegible]° N and 157°-30' E. The SOS signal was continued and all [illegible] on the bridge tried to find out a ship in the vicinity by radar, and visually from both wings. We also [illegible] and the night distress signals. The vessel [illegible] heeling to the starboard side.

At about 0700 hours the Chief Officer found, by radar, a [illegible] (CHILE MARU) at about 15° on the port bow and about 18½ miles distant. As he called me I also looked at the [illegible] the radar, range of which was 24 miles. The ship's [illegible] between about 270° and 285° because high waves were [illegible] both sides of the bow, although the steering was 27[illegible]. The Radio Officer told me that that ship could not [illegible] I told him to advise that ship to have steering 105°. [illegible] minutes thereafter the "CHILE MARU" noticed our [illegible] by radar. Although I am not sure the time, it [illegible] 0 or 0730 hours. Thereafter we tried to check [illegible] approach of the "CHILE MARU" on the radar and I think [illegible] revolutions of engine were then reduced to some extent.

After about 0700 (17 hours after flooding hold) hours the forward of the bridge was already covered with the sea because of submergence of

1400 hrs 2/6 to 0700 hrs 2/7 = 17 hrs

38-10

ORIGINA

the bow. At about 0715 hours the cargo way which leads from the bridge accommodation to No. 3 masthouse and is about 12 feet high or more from the main deck level was taken out by the waves coming from both sides. The forward part was sinking and I could only some occasions and momentarily see the top of davit on the stem and the top of the No. 1 masthouse, when the waves did not hit and the forward of the ship was pitching up.

At 0815 hours (13 1/4 hrs after flooding) the vessel further listed and it was then about 13°-14° or more to the starboard side. At this time the Captain ordered to abandon the ship and we passed the order to all the crewmembers and he also ordered to come to the boat deck in the after accommodation. The Captain instructed me to bring out the seaman's books. I attempted to pass the top of the hatch cover of No. 4 hold but it was too dangerous to walk. Then I went to the port side entrance of the middle accommodation to try to find the better condition to go back. Several minutes thereafter I tried to go back, holding the chain of the cargo hatch of No. 4 hold. Because of the waves, I lost the seaman's books. I moved back carefully holding the chain and station of the No. 4 masthouse. When I went to the boat deck on the starboard side, many crewmembers were waiting for the Captain and other crewmembers. Another and Officer had been there before

ORIGINAL

I reached. Soon after the Chief Officer and the Radio Officer came. The life boat had been always ready after we sent the distress signal.

At the same time I heard the apprentice engineer who was standing on the middle accommodation shouting that the Captain was taken away by waves, while he was trying to come to the aft passing on the hatch cover of the No. 4 hold. It was said that at that time the Captain was carrying the Log Books and other ship's documents. Then we immediately went to the port side and saw the Captain was on the sea about 200 meters apart from the port side. As the forward was continuing sinking, and listing to the starboard was increasing, the port side life boat, though it was ready, could not be lowered. We immediately threw a painting boat onto the sea on the port side. We shouted the Captain to come to the vessel but we received no answer from him. When the said painting boat was washed to the starboard quarter by waves, we could see the Captain no longer. We then shouted to the assistant engineer who was still on the bridge to come immediately to aft.

After he came to the boat deck, the Chief Officer ordered all the personnel to leave the vessel. The starboard

38-12

life boat with several crewmembers was commenced to lower by releasing 3 or 4 wire ropes from davits and it was lowered onto the sea. However, the rope fastened to the stern was broken, and the boat was carried, by waves, up to the top of the bulwark on the No. 7 hold starboard. The boat was further carried on the main dock by the high waves and crewmembers immediately boarded the boat. But at this time a cook jumped into the sea. However by the next waves the boat was capsized and all of the crewmembers on the boat were thrown out onto the sea. I was washed away by a wave about 20-30 meters from the boat and saw some crewmembers on the bottom of the boat. I swam and went back to the boat and then grasped a life line of the boat. At that time I noticed the cook and a steward being washed away from the boat.

The capsized boat was drifted along the starboard side of the vessel. The vessel was gradually separated towards the windward. The sea was very cold. When we sighted the "CHILE MARU", I turned back and saw the funnel of the middle accommodation and pannel of the radar in the after accommodation on the water.

When the "CHILE MARU" came close, they threw a life net and life buoys. Their port life boat was ready to lower but not lowered. We climbed up the life net.

38-13.

Exhibit 38

After we had been saved, we took a bath. When I felt better, I went to the bridge and asked the Captain of the "CHILE MARU" to search the distress area because crewmembers were still on the water. Then the "CHILE MARU" engaged in searching in the area. Soon after 4 ships (2 Japanese ships, 1 Greek ship and 1 Philippine ship) came to the distress area and a coast guard plane came to the spot and searched the area.

About 2 hours after we had been saved, the Japanese Captain showed a body with life jacket and picked him on the vessel. He was 2nd Officer Panotas Chrisost. He was probably drown. The Captain of the "CHILE MARU" also said that another Japanese vessel "RICHMOND MARU" picked up a dead body which was Paschalidis Aggelos.

As a result of this accident the Captain, Chief Officer and other crewmembers in total 10 were killed. 20 crewmembers were survived and arrived at outside Yokohama Port by the "CHILE MARU" at 10 o'clock on the 14th February.

After we were saved, we were advised by the Captain of the "CHILE MARU" that the sunken position of our ship was about 35°-21' N and 158°-08' E. It was estimated by

38-14

Exhibit 38

the Captain of the "CHILE MARU" who saw the sinking of our vessel.

The foregoing is true and correct to the best of my knowledge.

Gregos Mikes
2nd Officer of the
M.V. "ANTONIOS DEMADES"

P-[illegible] 22-70

THE ROYAL GREEK CONSULATE GENERAL, YOKOHAMA, JAPAN, HEREBY CERTIFY THE GENUINE SIGNATURE OF ..MR. GREGOS MIKES...
Yokohama, February 16, 1970

A.E. Lapradoloulos, Consul General, Yokohama.

A.R.E. 0102
Mer. Apx. 13,50
¥ 1430.-

38-15 Add.

J 425a

Exhibit 39

(Marine Note of Protest)

COPY

MARINE NOTE OF PROTEST

DATE:	16th February, 1970
PORT OF ARRIVAL:	Yokohama, Japan (14th February, 1970 Saturday)
SHIP'S NAME:	M.V. "ANTONIOS DEMADES"
OFFICIAL NUMBER:	1881
GROSS TONNAGE:	15,977 tons
NET TONNAGE:	10,479 tons
SUMMER DEADWEIGHT:	26,135 tons
SHIP'S ENGINE:	Fiat B758S, 11,000 BHP
TYPE OF SHIP:	Bulk Carrier with 7 holds (3 forward bridge and 4 aft bridge)
BUILT:	In Yugoslavia in 1963
PORT OF REGISTRY:	Monrovia, Liberia
NAME OF OWNERS:	Anthony Shipping Co., Ltd. of Monrovia, Liberia
NAME OF GENERAL AGENTS:	S. Livanos Shipbrokers Ltd., London
NAME OF MASTER:	Michael Sarris (missing)
CERTIFICATE:	Both Liberian and Greek master mariner
NAME OF PERSON WHO MAKES THIS PROTEST:	Gregos Nikos
RANKING IN THE SHIP:	2nd Officer
HOME ADDRESS:	Chios, Greece
PORT OF DEPARTURE:	Boston, U.S.A.

J 426a

Exhibit 39

TIME OF DEPARTURE:	At 0530 hours on 6th January, 1970
PORT OF DESTINATION:	Kimitsu, Japan
CARGO:	Iron Scrap of about 25,000 L/T

PLACE AND TIME WHEN ACCIDENT OCCURRED:	The vessel sank at about 33°-11' N and 158°-08' E at 0946 hours on 7th February, 1970 (local time where the accident occurred).
WEATHER AND SEA:	Westerly or WNW'ly wind, force about 10, waves of about 30 feet high from Westerly or WNW'ly direction. Occasional showers.
LOSS DUE TO ACCIDENT:	The vessel and all the cargo were totally lost. All the ship's documents were lost. 10 crewmembers including the Captain were drown or are missing.

Since both Captain Michael Sarris and Chief Officer Kostas Vlachos of the M.V. "ANTONIOS DEMADES" are missing, the undersigned Gregos Mikos, the 2nd Officer of the vessel does hereby make this marine Note of Protest on behalf of the owners, the vessel, and all the survived crewmembers (20 in total) who arrived at Yokohama by a Japanese Freighter "CHILE MARU" on 14th February, 1970, Saturday.

The M.V. "ANTONIOS DEMADES" loaded various types of iron scrap of approximately 25,000 L/T in all the 7 holds both in New York and Boston in U.S.A. All the steel hatch

85-2

covers of mackgregor type were properly secured by securing wedges and bolts. At 0530 hours on 6th January, the vessel with even keel of about 35', under the command of Captain Michael Sarris, left Boston bound for Japan via Panama Canal.

In route to Panama Canal, the vessel encountered a rough sea for about one day. She passed through the canal on 14th January and thence followed on a rhumb line to Japan at sea speed of about 14-15 knots. She passed the Hawaii Islands and Midway about 60 miles distant to port side respectively. Thereafter the vessel proceeded on a course of 278° (T). After passing the International Date Line, on 2nd February, 1970 the weather was worsening and sea was rough. At about 0200 hours on 6th February, wind was southwesterly to westerly with force of about 7, sea was rough with occasional showers. High waves were coming from the port side bow. The vessel was heavily pitching and rolling. The Captain ordered to reduce engine revolution from 122 to about 90-95 RPM and to change the wheel from auto pilot to mannual.

Thereafter wind direction was changed. A westerly wind with force of about 10 and large waves of 25-30 feet high were coming both from westerly direction and southwesterly direction. The weather was cloudy accompanying occasional showers. The vessel was heavily pitching and rolling and

Exhibit 39

sea water was falling down like a waterfall and pounding on the deck.

At about 1400 hours on 6th February, the Captain, Lookoutman and the undersigned saw from the bridge mountainous waves of about 30 feet high coming from both starboard and port bow directions onto the forward of the vessel. Immediately after the waves had passed, we saw dirty brown colored water on the port side aft of the No. 1 hatch. Then it was found that Nos. 4 & 5 sections of the steel hatch was opened.

The Captain immediately called the crewmembers of the deck department and they went, using life line, as far as the top of No. 1 masthouse, where they found that those sections were thrown down into the storing place, immediately after No. 1 hold and were badly bent & twisted. The hold was flooded with water. As the sections of the hatch cover were no longer located again and pumping out of the water by the forward pump was entirely useless due to oncoming-successive large waves, the vessel hooved up waves at a reduced speed.

On and after 0000 hours on 7th February, wind was then westerly or W'ly with force of about 10 and large waves of about 30 feet high coming from the same direction as the

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Exhibit 39

winds. The vessel was heavily pitching and rolling and listed about 6° to starboard. The said listing further increased and at 0500 hours of the same day, she listed about 10-12° to starboard. Accordingly the Captain ordered to send the international distress signals by wireless and to prepare life boats ready.

The crewmembers of deck department attempted to find out a ship in the vicinity, using all possible measures by wireless, radar, and visually, etc.

After 0700 hours the forward of the bridge was always covered with the sea because of submergence of the forward and the vessel gradually increased listing to starboard side. At about 0715 hours, the cat walk which leads from the middle accommodation to No. 3 masthouse was taken out by waves.

At 0815 hours the vessel further listed and it was then 14° or more to the starboard side. At this time the Captain ordered to abandon the ship and to come to the boat deck in the after accommodation. The Captain, who was carrying the log books and other shipping documents with him, was taken away to port side by waves. We saw him about 200 meters apart from the port side, and attempted to rescue throwing down a painting boat but it was in vain.

35-5

J 430a

Exhibit 39

We could lower the starboard life boat releasing several ropes. But when it was lowered onto the sea, the rope fastened to the stern was broken, and the boat was carried, by waves, up to the top of the bulwark on the No. 7 hold starboard. The boat was further carried on the main deck by the high waves and crewmembers immediately boarded the boat. But the boat was capsized by next waves and the crewmembers were thrown out onto the sea.

The capsized boat was drifted and crewmembers grapped life lines. Later we were rescued by the Japanese freighter "CHILE MARU".

The time and place of the sinking of the vessel as stated above were confirmed by the Captain of the "CHILE MARU".

We, all the survived crewmembers arrived at outside Yokohama Port at 1000 hours on 14th February, 1970.

I affirm the whole report mentioned above are true and correct.

P-25-70

THE ROYAL G[illegible] CONSULATE GENERAL, YOKOHAMA, JAPAN [illegible] OF THE ABOVE SIGNATURE OF M. GREGOS MIKES

Yokohama. February 16, 1970

Signature:

Gregos Mikes, 2nd Officer of the M.V. "ANTONIOS DEMADES"

[illegible] 0116
[illegible] Vol V 46
¥800.-

[illegible] Public Office, [illegible] General, Yokohama.

Q What kind of work were you doing on these ships?

A In the beginning as AB and then as bosun.

Q How long had you been a bosun before you came to the Antonios Demades?

A Nine to ten years.

Q Generally, what are the duties of a bosun?

A To distribute the work to the ABs, and then to make inspections daily, making rounds around the vessel. I get up one hour earlier, and I start work before the rest of the crew. Then together with the Chief Officer we continue, should it be required.

Q Were you the bosun on the Antonios Demades on her last voyage?

A Yes.

Q When did you join the ship?

A I don't remember exactly. However, it was at Osaka. I don't remember the exact date. At the time of that incident I was already on board for about ten months.

Q Where was the ship when you joined her in Osaka? Was she at a dock or in a repair yard or where?

A She was being drydocked.

Q After you joined the ship, did you make an inspection of the hatch covers and lower hold?

A As it's usually done, we make a round, so as to

form an idea as to the ship's condition.

Q Did you go down into each of the lower holds?

A Yes.

Q Did you look at the bulkheads between the holds?

A Yes.

Q Did you look at the MacGregor hatch covers?

A The shipyard undertook to replace rubber gaskets.

Q The question was, did you yourself, after that was done, inspect all the hatch covers?

A After that I went down and I did observe the hatch covers and they were not leaking.

Q That was at the repair yard?

A Yes. At the factory.

Q After that, did you personally have occasion to inspect or examine the hatch covers?

A Only when we load cargo and we raise and lower the hatch covers.

Q In what condition did you find the hatch covers and the bulkheads and the lower hold?

A They were in very good condition, because the ship was nearly a new one.

Q What was the general condition of the ship when you joined her?

A The ship was in good condition, because the company

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takes good care of them.

Q Was the ship well maintained during the time you were on board?

MR. JACOBSEN: Objection as a leading question.

A Yes.

Q Do you remember any pre-loading inspections on any voyages after you joined her?

A As usual, one would go to load cargo, and someone comes from ashore to inspect the holds, like a super cargo.

Q Were you on board when the ship loaded at New York and Boston for her last voyage?

A Yes, I was on board for ten months.

Q Just before starting to load the scrap at New York and Boston, what was the condition of the ship and the hatch covers and the lower hold?

A They were in good condition.

Q Who closed the hatches after loading was completed on this same voyage?

A As each hatch was completed, the Chief Officer would give me orders to close it, and I together with the deckhands would close it.

Q Is it correct that you supervised the closing of each hatch on this last voyage?

A Yes. And the Chief Officer is coming there to

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check too.

Q Did you have any trouble closing up any of the hatches?

A Never.

Q Will you tell us what you did to secure each hatch for the voyage?

A Yes. First there is a wire which goes to the first section and is secured there. The carpenter operates the winch. I stand on one side of the deck and an experienced AB stands on the opposite side on deck. There is a wheel -- each section has a wheel, and we watch to see that it goes to the guide and not outside.

We omitted the sweeping. First we must sweep around the hatch coaming channel where the wheel rolls along. Inside there is a channel that the water drains, and it must be clean. So pulling one section, the second section is being pulled too.

At the afterend of the first section there is a nerve, a little plate, and when the second section falls down, the rubber gasket sits on top, and, gradually, the next section and the next after that will follow.

In order for us to ascertain that the panels are in position there are like two steel stanchions, and as the panels proceed they hit that stanchion. Then each of the

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wheels has a lever which will assist them to sit properly. Having ascertained that the rubber gasket has set properly, then the carpenter with the more experienced AB secures the dogs. After we secure the dogs, then we secure the cross joint wedges.

Q Where are the dogs located?

A As the dogs are like that (indicating) there are two little things (indicating). In the hatch coaming where the wheels sit or it slides, there are holes. Then the dog comes through the hole, and then that dog passes on top of that thing which is like that (indicating). The bolt's head is of a conical shape. Then below it is the nut, and you tighten it.

Q I show you a group of photographs which are numbered on the back, and there are eleven.

Do these pictures look like the No. 1 hatch on the Antonios Demades?

A It must be this one (indicating).

Q The question is, do these generally look like the No. 1 hatch on the Antonios Demades?

A This must be the one (indicating).

Q First I'm trying to get a general identification of these pictures. Then I'll go to a particular picture and ask you to show me the dogs.

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Do these look like the hatch that you're talking about?

A It's not the one.

Q Of course it is not the ship. Does it look like your ship?

A The ship was exactly like that. Sure I can recognize my ship. They are the same.

MR. ALLEN: Let's mark these for identification. We can mark the group as one exhibit. Let's just mark one and say there's eleven of them.

(The above described eleven photographs were marked Defendant's Exhibit A for identification.)

MR. ALLEN: Let the record show Photograph No. R 3624/7 has been marked as Defendant's Exhibit A for identification, and it includes the other ten pictures which will be identified by their last number.

Q Now, looking at Photo No. 7, does that show the dogs you were talking about?

A This is the steel shape that I was referring to where the section hits against, because if it does not go exactly there, then the bolt will not pass through the hole.

Q Now, will you just take this pen and draw a circle around one of those dogs or bolts that you were describing.

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(Witness complies)

Q Now, will you take Photo No. 3 and draw a circle around one of the wedges you were describing.

A All these are wedges (indicating).

(Witness complies)

Q Now, after you tightened the dogs and put the wedges in position, does that make the hatch tight and secure?

A You see, if the cover does not go properly in the position that it's supposed to go, then the bolts and the wedges will not be able to tighten.

Q Is there anything more to be done after you tighten the bolts or dogs and insert all the wedges?

A Let me see the photograph. You see, each hatch coming has this thing here (indicating), which is a hole for the water to drain from the humidity and so forth, and you can close it during heavy weather and open it during other times or you can be guided accordingly. The cargo that we had did not require these to be open, so they were closed.

MR. ALLEN: Pointing to Photograph No. 11.

Q Now, getting back to the question, apart from what you just described, was there anything more to be done besides the dogs and the wedges to secure the hatch?

A No.

Q Were each of the hatch covers securely dogged down

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and fastened when the ship sailed out of Boston?

A Yes.

Q Were these hatches opened again, at any time before the ship sank?

A There was no reason to open any, and after all we had bad weather, there was no reason.

Q During the voyage from Boston after the Pacific, did you make regular inspections on deck?

A Yes. The Chief Officer was calling me at intervals, the morning, evening, and we were making inspections.

Q Did that include an inspection up forward around No. 1 hatch?

A Yes, all of them.

Q In what condition did you find the hatch covers and the ship, generally, throughout the whole voyage?

A As I said, they were in good condition.

Q Were the cargo holds sounded every day while the ship was at sea?

A Yes. The Chief Officer did.

Q Was there any water found in any of the cargo spaces up until the time that No. 1 hatch was stove in?

A The time that the hatch covers were stove in it was bad weather, and you could not sound, but prior to that it was all dry.

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Q All holds?

A Yes.

Q Was the MacGregor cover on No. 1 just as strong as the covers on all the other hatches?

A In my opinion, yes. However, I'm not an engineer.

~~Q How many sections are the No. 1 hatch cover in?~~

~~A I don't recall exactly. Some sections~~

Q Do you remember some bad weather some time at or about the time they crossed the international date line?

A Yes.

Q Will you describe what the weather was like.

A The waves were like mountains.

Q From what direction were they coming?

A From forward and slightly to port.

Q Were they breaking on deck?

A On top of hatch covers. It was on top of the hatch covers and live masses of water.

Q Did the ship reduce speed, at any time?

A As usual, during heavy weather, you reduce speed.

Q Did there come a time when you were called up to the bridge in connection with some damage to the ship up forward?

A I remember it was very heavy weather about one day before. The Captain telephoned, so I went there. He ordered

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me to take the most experienced ABs and to come to the bridge.

Q When you got to the bridge, what did you see up forward?

A The Captain told me that there must be something wrong up forward. And I saw some reddish water.

Q Could you tell me where the reddish water was coming from?

A It was heavy water and the water was being carried away to different directions.

Q Could you see any part of the No. 1 hatch from the bridge?

A You cannot see it, because it's obscured by the mast house.

Q Could you see any part of the hatch covers or the chains or any part of the structure?

A The forward sections you could see very little, but the after sections you could not see from the bridge. Those were missing, could not be seen.

Q Now, what did you do then?

A The Captain told me that I should go forward to see what was wrong. I went through the porthole outside the saloon. There is a floor where the No. 3 winches are, and through the porthole I went into that.

Q Let me interrupt. Roughly, what was the size of

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this opening that you call a porthole?

A It's a square window like opening.

Q Large enough for a man to get through?

A Freely.

Q So then did others go with you?

A Because it was heavy weather I told them to wait until I get to the mast house. I took a rope, and I went on top of the mast house. I fastened it, they tightened it, so as to create a safety line. It was above the hatch cover.

Q Did you follow this same procedure and go all the way forward to the mast house overlooking No. 1?

A Yes.

Q When you got there, tell us what you saw at No. 1 hatch?

A When I went there I opened that square shaped thing, and under it I could see the doors falling, hatch boards.

Q Do you mean the steel sections of the hatch cover?

A Yes, that's what I mean.

[redacted]

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Exhibit 40

~~the ... found ... the last section had sunk.~~

Q Would there be an indentation?

A Yes. It was an indentation like this (indicating).

Q Now, am I correct that the first section was in place, the second section was in place, but it had an indentation in the middle, and the third and fourth sections were twisted and lying on the main deck?

A Yes, because if they were straight I would do something to put them back.

Q Could you see the chains along the side?

A Yes.

Q Were they in place or off to the side or where were they?

A For those sections that had fallen down?

Q Yes.

A They were dilapidated.

Q Was there any possibility of replacing those hatch covers to keep the water out?

A With what?

Q Was No. 1 hold filled with water, at that time?

A Yes.

Q Was the water and the cargo moving around or was it just lying there flat?

A It was heavy weather, you see, so everything was

40-12

moving.

Q Could you hear anything?

A The strong wind prevented us from hearing.

Q Where is the pump that services No. 1 hold?

A There's a pump room, No. 1 and 2. No. 1 takes from that.

Q If you want to operate that pump, how do you get to it?

A From deck, and an engine department man goes to operate it.

Q During this heavy weather that you were talking about, could anyone have gone forward on deck to get to that pump room?

A He couldn't have.

Q After you inspected the damage, then did you return to the bridge?

A Yes.

Q While you were making this inspection, had the ship changed course?

A It had turned, because if it had not turned we wouldn't been able to go there.

Q So after you returned to the bridge, did the ship stay on the same course or did she change and head for Japan?

A That I couldn't say, because there was no visibility

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nor any object that I could see.

Q By this time it was dark, is that right?

A Yes.

Q What happened to the ship during the night, that you are aware o.

A During the night the portholes broke, the porthole in the front wall of the bridge, and I took one from the after end of the bridge accommodation and I replaced it in the forward end.

Q Now, was this on the night before you went up to No. 1 hatch or was it the night after you went up to No. 1 hatch?

A Before.

Q Now, I want to know, what did you do the night after you came back from No. 1 hatch?

A I went aft, because I was wet and I had to change into dry clothes.

Q Then what did you do that night?

A I went to the bridge again. There's a gangway above the hatch covers, about six feet above the hatch covers, and, carefully, you could walk along the gangway towards the bridge.

Q Is that between the bridge and the after crew quarters?

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A Yes.

Q What time did you go to bed that night?

A I would have been crazy if I went to sleep.

Q Did you stay awake all night?

A And the first night too.

Q I'm just talking about the last night.

What did you notice about the ship during that night?

A I noticed that the ship had no lower life.

Q Could you tell whether it was listing?

A It had listed towards starboard.

Q Could you tell whether or not it was sitting deeper in the water than before?

A Sure.

Q Did there come a time when the order was given to abandon ship?

A That was in the morning hours.

Q Was that the morning after the damage to No. 1?

A Yes.

Q What did you do to get off the ship?

A You mean to abandon the ship?

Q Yes.

A The crew put on the life jackets, we took along certain items that we needed, for example, whiskey, blankets.

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I just say this is what we had to do before abandoning.

Q Did you get into a lifeboat?

A Yes.

Q Were you picked up by another ship?

A Yes. We were picked up by another ship, but it was too late. The boat had sank.

Q The lifeboat?

A The lifeboat.

Q [redacted] ship sinking when you left it?

A It was going down gradually, but at that time it had covered [redacted] No. 4.

Q [redacted] covering No. 4 when you left?

A [redacted]

Q Were all the survivors picked up by the same ship you were on?

A Yes.

Q Did anybody save the logs or the seaman's books or any ship's records?

A Those were being carried by the Master who drowned -- was the first one.

Q What do you mean he was the first one?

A The first one drowned was the Captain.

Q The first person to drown was the Captain?

A Yes.

40-16

Q Did this ship have cowl ventilators?

A Yes.

Q Were they in place on this last voyage?

A I had taken them off since Angola, about six or seven months prior to that. I don't remember exactly. I took them off, I put wooden plugs, and covered them with three tarpaulin covers.

Q That was on all the ventilators?

A In all of them.

Q When you sailed from Boston, did you do anything to cover up the opening to the chain locker?

A First we put burlap, we put it around the chain, and then you put it about three fingers below the opening, and you fill it with cement.

Q Did you do that?

A Yes, the ship cannot proceed without doing this covering of the openings.

Q And you did it on both sides?

A Surely.

Q On this voyage, did the ship have a full crew and all the equipment that you needed?

A Yes.

MR. ALLEN: I'll ask that this copy of the capacity plan be marked as Defendant's Exhibit B.

40 17

MR. JACOBSEN: I thought, maybe, he might have already done that.

MR. ALLEN: No, he didn't go over it line by line. I asked him a couple of questions about things he said in there, and that was about all. He can't read English. So there was no reviewing of it as such.

[redacted]

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the waves, so that we will not be carried away by them."

MR. JACOBSEN: Now, what about the board's storing place.

A They were on deck. They were in way of the storing place, but had fallen down on deck.

Q In the storing place down or in the storing place vertical?

Where were they and then in what position were they?

A In the place where they are being stowed or stored, but down.

Q Meaning flat rather than vertical?

A Yes.

MR. JACOBSEN: Off the record.

(Discussion off the record.)

MR. JACOBSEN: Again he wants to say they were not upright, but down.

A And twisted. How could they stay in that condition?

MR. JACOBSEN: He is referring to the middle of Page 4.

Please read into the record what this says, and then read into the record the way he wants it.

THE INTERPRETER: On Page 4, second paragraph or on the 11th line from the top, "Numbers 4 and 5 covers

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upright down, bent and twisted in the central section (See Exhibit 1, Sketch)."

MR. JACOBSEN: Now, interpret it the way he wants it.

THE INTERPRETER: "It fell down and became twisted."

Q Can you now phrase it in English the way you want it?

A The way I saw them, the two last sections of the hatch cover, I found them falling down on deck and twisted.

Q In the place where the storage place is?

A Yes.

Q Then this signature here, on Page 5, is that your signature?

A Yes.

Q The sketch, Exhibit No. 1, that was referred to in the body of the statement, is that the one that is attached?

A Well, this must be the one.

Q Referring to the sketch, it shows the last two in the storage space, and I would say that they look vertical. Do you want to change the description of those, also?

A They were down.

Q You are referring to these two here (indicating)?

A I cannot really distinguish them here in this

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sketch.

Q These two here (indicating)?

A The two last sections.

Q I will put a line like that (indicating) and project it out here, and put the letter "X".

Those are the two you're talking about?

A Y[illegible]he two last sections in the hatch.

Q You refer to "about five months ago all the chains of the hatch covers were replaced by new ones."

Do you recall where that was?

A These were replaced, some by the Chief Officer and the carpentar, and some in the shipyard. I remember that while in the shipyard all these shackles were replaced, and they were thrown away.

Q You are referring to a photo. What part of the photo?

A This shackle that joins the chain and all the shackles that were new ones.

Q Can you draw a circle?

(Witness complies)

MR. JACOBSEN: I project a line from there and we will call it "Y", showing the shackle. This is Exhibit A-1.

MR. ALIEN: Yes, that's right.

40-21

A They were twisted. The diameter was not the same. They had fallen down. They had lost their dimensions.

Q Were they pushed back there by the wind or sea water or both?

A The wind did not take them. It must be a lot of pressure to push them there.

Q They did not go down into the hold though?

A No.

Q Refer to the sketch in the statement. How many ones were dented in, but in place.

MR. ALLEN: Wait a minute. I'm going to object to the form of the question, because, I think, it has already been identified that there were four sections to this hatch, and the sketch shows five.

MR. JACOBSEN: Absolutely not. The statement shows five.

A No. 3.

MR. ALLEN: I say the statement shows five and he testified there were four.

MR. JACOBSEN: No, I don't agree.

Q Would you put a mark next to No. 3, the one that is dented in.

(Witness complies).

Q Is that an "X" on the side of No. 3?

4/22

[redacted]

[redacted] 3?

[redacted].

Q When you say the chains were dilapidated when you got up there and looked, could you tell me what you mean by dilapidated?

Were they lying alongside the hatch or what?

A Each section has these wheels, because a similar wheel is on the opposite side. This makes the section to open. Now, all these things are gone away for these two sections, I'm saying.

MR. ALLEN: Do you mean broken off?

THE WITNESS: I don't know, but they were not there. All of these things were gone away.

Q You are referring to Exhibit A-2 and to the wheels alongside the coaming?

A It was the same on the ship that I was on.

Q Going back to the chain, where was the chain when you looked at No. 1 mast house?

A It was in No. 3 hatch portside. I had seen it from the top of the bridge.

Q So that the chain had parted somewhere?

A However, this wheel was not there (indicating). There was nothing there, neither the chain nor the wheel.

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Q What is the purpose of the chain?

A The purpose is for one section to pull the other. Also to adjust the distance between the two.

Q So that the chain links the section, is that right?

A Yes. If there is no chain you cannot close the hatch cover, because you would pull only one section.

Q To open and close the hatch sections you use a wire rope to the winch, is that right?

A Yes.

Q But that wire rope is not used after the hatch sections are secured for sea?

A No. You leave the lifting wire -- you leave it in place only when the ship is doing loading or discharging.

Q It does not contribute in any way to the strength of the hatch cover once the ship is at sea?

A After you secure the bolts it's no longer required.

Q Now, when you looked at this, could you determine what gave first?

A How could I know that? I must be a magician.

Q When you got on the Antonios Demades, she was in Osaka, is that right?

A Yes.

Q Did you see them do any work at No. 1?

A No, I don't remember.

40-24

I do not see.

Q Did you see any work done to the coamings or to the chains at No. 1 or at any of the other hatches?

A Such things I didn't see, because it was not done.

Q The Survey Report which you probably have not seen, indicate certain repairs.

What I am asking you is, if you saw No. 1 while it was being repaired or before it was repaired at Osaka in January, 1969?

A There were no repair work. I didn't see any.

Q Have you ever seen the Antonios Demades before Osaka in January or December, when you got on?

A I had not seen it, and I didn't know it.

Q In your statement you indicate that there were small pieces of iron scrap, that is, six inches loaded into No. 1 hold.

Can you remember whether that was smaller than the type that was loaded in the other holds?

A Yes, I remember in the other hatches we loaded compressed bundles of scrap iron, whereas, in No. 1 hold we loaded shredded steel.

Q It says here, six inches.

A No. That was a shredded steel because here in Newark there's sort of a mill, and you put a car there and it

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shreds it, and it comes out in little pieces. Now, six inches, five inches, that's something else.

Q Have you had any trouble with MacGregor hatches on any other ships?

A In another ship?

Q Yes. Not the Antonios Demades.

A There were operating properly.

Q Have you ever had any situations where they had to repair the coamings because they were deformed?

A Where?

Q On any other ship.

A No. Only minor repairs, such as those connected with stevedoring damages during discharge, for example.

Q Such as with scrap iron and scrap steel?

A No.

Q Have you been on any ships where the MacGregor hatch covers had to be repaired?

A Yes. There were ships that we did repairs.

Q What kind of repairs were those?

A Renewing rubber gaskets, buying wheels.

Q What about adjusting the level line of the hatch [redacted]?

A No.

Q If you had a deformed edge of the hatch coaming

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top, would this affect the operation of the Mesteger [illegible] severs?

A Yes. Even a slight deformation would make the difference.

MR. JACOBSEN: No further questions.

REDIRECT EXAMINATION BY MR. ALLEN:

Q When they took this statement from you in Japan, do you remember the nationality of the man that took it?

A I don't know. Japanese or American, I don't know.

Q Did they read the statement back to you in Greek before they asked you to sign it?

A Yes. It was read to me in Greek. However, it was written in English.

Q Did you draw the sketch or did somebody else draw it?

A I didn't do it. You know, those days I was quite dizzy.

Q In the forward pump room, do you know whether or not that was a diesel engine that drove that pump?

A Because every Saturday the engineer sets it on and it has an exhaust on top for a gasket.

Q Was it diesel?

A It was diesel.

Q Were the pumps regularly tested by the engineers?

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A Which pumps?

Q I thought you just said the bilge pumps.

A Every Saturday.

Q When you joined the ship in Japan, was it at the beginning or the middle or the end of the repair period?

A It was only a few days before sailing.

MR. ALIEN: I have no further questions.

RECROSS EXAMINATION BY MR. JACOBSEN:

Q On your statement, Page 5, it does indicate that it was sworn to by you and signed by you before a Mr. Papadopoulos, Consul General, Yokohama, is that correct, to your knowledge?

A Yes.

MR. JACOBSEN: No further questions.

Sworn to before me this

_____ day of _____ 1975.

40-28

J 459a

Exhibit 41

(Statement of Nikolaos Kapantais)

ORIGINAL

Yokohama, Japan
February 15, 1970

STATEMENT OF BOATSWAIN KAPANTAIS NIKOLAOS OF THE M.V. "ANTONIOS DEMADES"

Name:	Kapantais Nikolaos
Home address:	Sykiada, Chios, Greece
Nationality:	Greek
Date of Birth:	1927
Position in the ship:	Boatswain
Date and Place I joined:	Osaka, Japan in 1969

I have been at sea since 1942. I was in the Greek Navy from 1942 to 1946. Thereafter I have worked on ocean-going merchant ships, out of which I served as Boatswain for about 10 years.

When the cargo is loaded and discharged in the port, I as Boatswain supervise the opening and closing of hatches. I have experiences to handle mackgregor type of steel covers for about 22 months. Before joining this vessel, I also handled the mackgregor type hatches of the freighter named "ASHEAN" and this "ANTONIOS DEMADES" was the 2nd ship. My duties at sea are to distribute the work to A/B and the supervise their works on ship's maintenance and to inspect the hatches and to make sounding of bilges when weather

Exhibit 41

permits. In case of dry cargo such as wheat, we normally inspect twice a day but in case of iron scrap, I normally inspect the holds at about 8 o'clock every morning together with the Chief Officer.

On this voyage, the vessel loaded iron scrap both in New York and Boston. The opening and closing of all the hatch covers (mackgregor type) were conducted by the crews' hands with my guidance. I remember small pieces of iron scrap (e.g. 6 inches) were loaded onto No. 1 hold. There was space about 4-5 feet at the hatch coamings and some spaces in the central area,,although I cannot say how many feet below from the main deck level to the top of the cargo. When the cargo loading onto No. 1 hold was finished, the said cover was closed, putting all the five sections in proper location. Then we applied the securing bolts all around the hatch, in total, in my recollection, about 40 and wedges on the top of the hatch sections, I think, about 25 in total. Each section has about 5 steel wedges. In any event all the securing sections of the hatch were properly secured by securing bolts and steel wedges. We have spare parts on board, accordingly if any of the bolts and wedges is missed or is not in order, it can be immediately replaced.

NK

41-2

Exhibit 41

Since I joined this vessel, there has been no troubles about any equipments of mackgregor type hatch covers. Furthermore about 5 months ago all the chains of the hatch covers were replaced by new ones. Accordingly on this voyage every item of the hatch covers was in good condition.

On this voyage when the weather permitted, both the Chief Officer and I visually inspected the conditions of all the hatch covers, and sounded bilges of all the holds. Sounding indicated normal condition and the hatch covers were in normal good condition. Such inspection and sounding were conducted until the vessel passed the International Date Line. Thereafter the vessel encountered the rough sea and heavy weather and we could not manage to do so.

At about 2 p.m. on 6th February, while I was working for making the jacob ladder in the after accommodation, I received the order from the Captain over the phone that I and A/B Sailors on duty to come forward. Then I went to the bridge and I saw the Chief & 2nd Officers and A/B Sailors there. The Captain told us to go forward to inspect the No. 1 hatch which was blown open. From the bridge I saw dirty colored water in the area of No. 1 hatch, which moved depending upon the waves directions.

NK

41-3

Exhibit 41

As waves were coming from forward, it was impossible to walk on the deck. We went through the port hole of the main saloon on the starboard side of the middle accommodation, and having life lines, carefully crossed on the top of the No. 3 hatch cover and we could manage to reach the top the No. 2 masthouse. We walked on the hatch cover of the No. 2 hold, seeing interval of waves. Then we went up to the top of the No. 1 masthouse.

We looked down through a small opening in the central area of the top platform and saw that Nos. 4 & 5 sections were in the storing place. Nos. 4 & 5 covers were upright down bent and twisted in the central section (see Exhibit 1 - sketch). I also saw sea water coming in and out through the opening of No. 1 hold. The hold was fully filled with water. The Captain and the Chief Officer discussed about the counter measure and the Captain decided that it would be impossible to recover the hatch covers and that the vessel would hoove up wind, maintaining steering way.

Then we all together came back to the bridge and I remained on the bridge for about 1½ hours and I noticed that the vessel was turning to upwind. After that I left the bridge and went aft to have my dinner. At around 7 o'clock

NK

41-4

J 463a

Exhibit 41

I went up to the life boat deck. I looked around if there were anything to secure.

The foregoing is true and correct to the best of my knowledge.

Kapantais Nikolaos
Boatswain of the
M.V. "ANTONIOS DEMADES"

P-28-70

THE ROYAL GREEK CONSULATE GENERAL, YOKOHAMA, JAPAN, HEREBY CERTIFY THE GENUINE SIGNATURE OF M.V. KAPANTAIS NIKOLAOS

Yokohama, February 16, 1970

A.E. Papadoponlos, Consul General, Yokohama.

ROYAL CONSULATE GENERAL OF GREECE * YOKOHAMA *

A. H. K. / 9127
Met. Aas. 13.3.70
¥ 1925.—

41-5

Exhibit 41

EXHIBIT - 1 -- SKETCH

TABLE 6.3
Hull Girder Section Modulus Requirements

TYPE VESSEL		$L \leq 213\text{ M}$ / 700 Ft	$213\text{ M}/700\text{ Ft} \leq L \leq 305\text{ M}/1000\text{ Ft}$	$L \geq 305\text{ M}$ / 1000 Ft
1 and 4	SM_T	SM_T	SM_T	SM_T
	SM_B	$1.03\ SM_T$	$\left[\frac{305-L}{3066}+1\right] SM_T$ *Metric Units* $\left[\frac{1000-L}{10000}+1\right] SM_T$ *British Units*	SM_T
2	SM_T	SM_T	SM_T	SM_T
	SM_B	$1.10\ SM_T$	$\left[\frac{305-L}{920}+1\right] SM_T$ *Metric Units* $\left[\frac{1000-L}{3000}+1\right] SM_T$ *British Units*	SM_T
3	SM_T	SM_T	SM_T	SM_T
	SM_B	$1.07\ SM_T$	$\left[\frac{305-L}{1314}+1\right] SM_T$ *Metric Units* $\left[\frac{1000-L}{4.86}+1\right] SM_T$ *British Units*	SM_T

6.3.2 *Section Modulus Calculation.*—In general, the following items may be included in the calculation of the section modulus provided they are continuous or effectively developed within the midship .4L and gradually tapered beyond the .4L:

Deck plating (Strength Deck and other effective decks),
Shell and inner bottom plating,
Gunwale angle or its equivalent,
Deck and bottom girders,
Plating and longitudinal stiffeners of longitudinal bulkheads,
All longitudinals of deck, sides, bottom and inner bottom.

In general, the net sectional areas of longitudinal strength members are to be used in the hull girder section modulus calculations. The section modulus to the deck or bottom is obtained by dividing the moment of inertia by the distance from the neutral axis to the molded deck line at side amidships or to the base line, respectively.

6.5 Strength Decks.

6.5.1. *Definition.*—The uppermost deck to which the side shell plating extends for any part of the length of the vessel is to be considered the Strength Deck for that portion of the length, except in way of comparatively short superstructures, or in way of other superstructures where it may be desired to adopt the modified scantlings for the side shell (see 15.3.4) and the modified requirements for the Superstructure Deck as given in 17.1.2. In such cases, the deck on which the superstructures are located is to be considered the Strength Deck in way of same. In general, the effective sectional area of the deck for use in calculating the section modulus is to exclude hatchways and other openings through the deck but may include seam overlaps and continuous gunwale angles, or their equivalent.

6.5.2 *Tapering of Deck Sectional Areas.*—The deck sectional areas used in the section modulus calculations are to be maintained throughout the midship .4L in vessels of normal sheer. They may be reduced to one-half the normal requirement at .15L from the ends. In way of a superstructure beyond the midship .4L the Strength Deck area may be reduced to approximately 70 per cent of the normal requirement at that location.

6.7 Effective Lower Decks.

To be considered effective for use in calculating the hull girder section modulus, the thicknesses of the stringer plates and deck plating are to comply with the requirements of 16.5.1. The sectional areas of lower decks used in calculating the section modulus are to be obtained as described in 6.5.1 but should exclude the cutouts in the stringer plate in way of through frames. These areas are to be maintained throughout the midship .4L and may be gradually reduced to one-half their normal value at .15L from the ends.

6.9 Still Water Bending Moments.

In general, still water bending moment calculations for the anticipated loaded and ballasted condi-

42-1

TABLE 6.4 (*Metric Units*)

L Meters	f	s		L Meters	f	s	
		Ship Types 1, 2, and 4	Ship Type 3			Ship Types 1, 2, and 4	Ship Type 3
45	150	.670	.595	180	3684	.670	.595
50	197	.670	.595	185	3941	.670	.595
55	249	.670	.595	190	4201	.670	.595
				195	4467	.670	.595
60	308	.670	.595				
65	371	.670	.595	200	4737	.670	.595
70	440	.670	.595	205	5022	.670	.595
75	516	.670	.595	210	5322	.670	.595
				215	5627	.670	.595
80	593	.670	.595				
85	678	.670	.595	220	5940	.670	.595
90	773	.670	.595	225	6264	.670	.595
95	868	.670	.595	230	6597	.670	.595
				235	6941	.670	.595
100	968	.670	.595				
105	1082	.670	.595	240	7296	.670	.595
110	1196	.670	.595	245	7664	.670	.595
115	1325	.670	.595	250	8033	.672	.597
				255	8411	.673	.598
120	1460	.670	.595				
125	1603	.670	.595	260	8789	.675	.600
130	1750	.670	.595	265	9175	.677	.601
135	1904	.670	.595	270	9568	.678	.603
				275	9961	.680	.605
140	2066	.670	.595				
145	2236	.670	.595	280	10363	.682	.607
150	2409	.670	.595	285	10762	.683	.608
155	2595	.670	.595	290	11167	.685	.610
				295	11581	.686	.611
160	2783	.670	.595				
165	2994	.670	.595	300	11996	.688	.613
170	3208	.670	.595	305	12407	.690	.615
175	3438	.670	.595				

tions are to be submitted for vessels having lengths of more than 122 meters (400 feet). For smaller vessels, the necessity of submitting the above calculations will be considered in each case, taking into account the type of vessel, the arrangement, the proposed loading conditions, etc. When still water bending moment calculations are not submitted, the longitudinal strength requirements will be based on formula II of Table 6.2. Where cargo is carried in alternate holds, or where cargo or ballast are carried using distributions which depart from a reasonably uniform distribution, the above calculations are to be submitted in the form of curves showing hull girder shear and bending moment values along the entire ship length. Where still water bending moment calculations show maximum values outside the midship .4L, the amount and distribution of effective longitudinal material will be subject to special consideration.

6.11 Loading Manual.

In general, a Loading Manual is to be prepared and submitted for review in the case of vessels of types 2 through 4 inclusive (see Table 6.1) for which still water bending moment calculations are required by 6.9. This manual is to show the effects of various loaded and ballasted conditions upon longitudinal bending moments, and is to be furnished to the master of each vessel for guidance. Alternate methods of obtaining this information will be considered.

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SECTION 12

WATERTIGHT BULKHEADS

12.1 General.—All vessels of ordinary type and normal form are to be provided with strength and watertight bulkheads in accordance with this section; in vessels of special type where adherence to these rules is found to be impracticable, the arrangements will require to be specially approved. In all cases the plans submitted shall show clearly the location and extent of the bulkheads.

Watertight bulkheads constructed in accordance with these rules will be recorded in the RECORD as WT (watertight), the symbols being prefixed in each case by the number of such bulkheads.

12.3 Strength Bulkheads.—All vessels are to have complete transverse bulkheads extending to the Strength Deck, spaced not over 30.5 meters (100 feet) apart. This is to be accomplished by the fitting of substantial transverse 'tween deck bulkheads immediately over the main watertight bulkheads. Where this is impracticable, the transverse strength and stiffness of the hull is to be effectively maintained by deep webs or partial bulkheads.

12.5 Arrangement of Watertight Bulkheads.

12.5.1 *Collision Bulkheads.*—Collision bulkheads are to be fitted in all vessels; they are to be not less than .05L abaft the stem at the load line at any point and are to extend to the Freeboard Deck preferably in one plane; in the case of vessels having long superstructures at the fore end, they are to be extended weathertight to the Superstructure Deck. The extension need not be fitted directly over the bulkhead below provided it be not less than .05L abaft the stem at the load line and the part of the Freeboard Deck which forms the step is made effectively weathertight.

12.5.2 *After Peak Bulkheads.*—After peak bulkheads are to be fitted in all screw vessels so arranged as to enclose the shaft tubes in a watertight compartment. They are to extend to the Strength Deck, or efficient partial bulkheads are to extend thereto. In sailing vessels which have sea connections to after pumps, the pumps are to be enclosed in a watertight compartment.

12.5.3 *Machinery Spaces.*—Machinery spaces are to be enclosed by watertight bulkheads which extend to the Freeboard Deck. In those cases where the length of the machinery space is unusually large in association with a small freeboard the attention of designers is called to the desirability of extending the bulkheads to a deck above the Freeboard Deck, the fitting of an intermediate bulkhead, or the inclusion of a watertight deck over the machinery space which, in association with tight casings, might confine the amount of flooding in the event of damage in way of the machinery space.

12.5.4 *Hold Bulkheads.*—In addition to the foregoing required watertight bulkheads, in the absence of other standards the following arrangement of intermediate watertight bulkheads is recommended as a guide to providing a reasonable standard of subdivision for cargo vessels of the ordinary type. Where the bulkheads are spaced to provide optimum protection against flooding, modified arrangements will be considered. It is recognized, however, that for certain types of cargo vessels in special services it may be impracticable to adhere to the number and arrangement of hold bulkheads as recommended. In such cases, the Bureau is prepared to consider an alternative arrangement or even the omission of certain bulkheads in order to meet the requirements of special trades. In vessels of 87 meters (285 feet) length and above a watertight bulkhead, extending to the Freeboard Deck, is to be fitted between the fore peak bulkhead and the forward bulkhead of an amidship machinery space; two such bulkheads are to be fitted between the fore peak bulkhead and the forward bulkhead of an after machinery space; these bulkheads are to be arranged so as to divide the hold into approximately equal lengths but the forward bulkhead in each case is not to be more than .2L abaft the stem.

Vessels of 102 meters (335 ft.) length and above are to have, in addition to the foregoing, a watertight bulkhead extending to the Freeboard Deck between the after peak bulkhead and the after bulkhead of an amidship machinery space; this bulkhead is to be about .2L to .25L forward of the after post. Where the machinery is aft, three watertight bulkheads are to be fitted between the fore peak bulkhead

and the forward bulknead of the machinery space. Where the freeboard is less than .15d in vessels of 102 meters (335 feet), .2d in vessels of 133 meters (435 feet) length and above and where it is less than a proportional ratio of the draft in vessels between 102 and 133 meters (335 and 435 feet) length, the bulkheads are to extend to a superstructure deck or an additional bulkhead is to be fitted forward and aft of an amidships machinery space and forward of an after machinery space. Vessels of 198 meters (650 feet) length and above are to have, in addition to the foregoing, a second watertight bulkhead extending to the Freeboard Deck between the fore peak bulkhead and the forward bulkhead of a midship machinery space. Where the machinery is aft, four watertight bulkheads are to be fitted between the fore peak bulkhead and the forward bulkhead of the machinery space. The spacing is generally not to exceed the spacing of strength bulkheads given in 12.3. In each case the bulkheads are to be arranged so as to divide the holds into approximately equal lengths but the first bulkhead abaft the fore peak is not to be more than .2L from the stem.

In vessels having comparatively small sheer, the arrangement of the bulkheads is to be adjusted to provide no less effective subdivision than the above.

12.5.5 *Chain Lockers.*—Chain lockers located abaft the collision bulkhead or those which extend into a fore peak deep tank are to be made watertight. The arrangements are to be such that accidental flooding of the chain locker cannot result in damage to auxiliaries or equipment necessary for the proper operation of the vessel.

12.7 Construction of Watertight Bulkheads.

12.7.1 *Plating.*—Plating is to be of the thickness derived from the following formula:

$$t=\frac{s(h+6.1)}{1830}+3.05 \quad \textit{Metric Units}$$

$$t=\frac{s(h+20)}{6000}+.12 \quad \textit{British Units}$$

Where:

t = The thickness in millimeters or in inches.

s = The spacing of stiffeners in millimeters or in inches.

h = The distance, in meters or in feet, from the lower edge of the plate to the Bulkhead Deck at center.

In large passenger vessels, where the plating and stiffeners are entirely welded the thickness of the plating may be modified. The plating of *collision bulkheads* is to be obtained from the table using a spacing of 152 mm (6 in.) greater than that actually adopted. The plating of after peak bulkheads below the lowest flat is not to be less than required for solid floors in the after peak space. (See Section 8.) The lowest strake of plating is to be increased 1 mm (.04 in.) in each case and it is to extend at least 915 mm (3 ft.) above the top of the hold ceiling. Plates in the limbers and bottom plates on bulkheads at the ends of stokeholds or bunkers in coal burning vessels for a distance of 610 mm (2 ft.) above the stokehold floor are to be at least 2.5 mm (.1 in.) greater than the Table thickness.

12.7.2 *Boundary Angles.*—Boundary angles are to have flanges of the sizes required for the rivets used; across the inner bottom the horizontal flange is not to be less than that of the floor reverse angle. Boundary angles are to be at least 1.5 mm (.06 in.) thicker than the bulkhead plates; they are to be double riveted where the distance to the top of the bulkhead exceeds 10.67 meters (35 feet).

12.7.3 *Stiffeners.*—Stiffeners are to have section moduli in centimeters cubed or in inches cubed as given by the formula:

$$SM=7.9Nl^2 \quad \textit{Metric Units}$$

$$SM=0.0041Nl^2 \quad \textit{British Units}$$

The length *l* is the distance in meters or in feet between the heels of the end attachments; where horizontal girders are fitted, it is the distance from the heel of the end attachment to the first girder, or the distance between the horizontal girders. The value of N for use with the formula is obtained from the following:

$$N=s\times h\times c$$

Where:

s = The spacing of the stiffeners in meters or in feet.

h = The distance in meters or in feet from the middle of *l* to the Bulkhead Deck at center; where that distance is less than 6.10 meters (20 feet) h is to be taken as .8 times the distance in meters plus 1.22 (feet plus 4).

c (for vessels 65.50 meters (215 feet) length and above)

= .35 for stiffeners having efficient bracket attachments.

= .46 for stiffeners having efficient brackets at one end and supported by clip connections or by horizontal girders at the other end.

= .56 for stiffeners having clip connections at both ends, or clip connections at one end and supported by horizontal girders at the other end, and for stiffeners in the uppermost 'tween decks having no end attachments.

= .70 for other stiffeners having no end attachments and for stiffeners between horizontal girders.

Where the stiffeners are welded to the plating and the brackets are also completely welded, the values for c for stiffeners having brackets at both ends or at one end only may be .30 and .43 respectively and where unattached stiffeners or stiffeners between girders are welded to the plating, the value of c may be .60.

In vessels under 45 meters (150 feet) in length the above values for c may be .29, .38, .46 and .58 respectively and h may be taken as the distance in meters or in feet from the middle of *l* to the Bulkhead Deck at center in every case. Vessels between 45 and 65.50 meters (150 and 215 feet) length may have intermediate values for **N**.

The value of **N** for stiffeners on *collision bulkheads* is to be at least 25 per cent greater than required above for stiffeners on ordinary bulkheads.

12.7.4 *Corrugated Bulkheads.*

(a) *Plating.*—The plating of corrugated bulkheads is to be of the thickness required by 12.7.1 with the following modification. The spacing to be used is the greater of dimensions a or c as indicated in Figure 12.1 where the angle ϕ is approximately 45° or more. Where the angle ϕ is appreciably less than 45°, the spacing to be used is to be the greater of the following:

$$a+\frac{b}{2} \text{ or } c+\frac{a}{2}$$

(b) *Stiffeners.*—The stiffener value for a corrugated bulkhead is to be as determined by the formula:

$SM = 7.9\,Nl^2$ *Metric Units*

$SM = .0041Nl^2$ *British Units*

where *l* is the distance in meters or in feet between the supporting members and **N** is as determined from 12.7.3 using a + b (Figure 12.1) for s. The developed section modulus may be obtained from the expression:

$$SM = \frac{t \times d^2}{6} + \frac{a \times t \times d}{2}$$

where a, t and d are as indicated in Figure 12.1. A line of anti-tripping chocks is to be fitted at approximately mid-span where *l* is in excess of about 6.1 meters (20 feet).

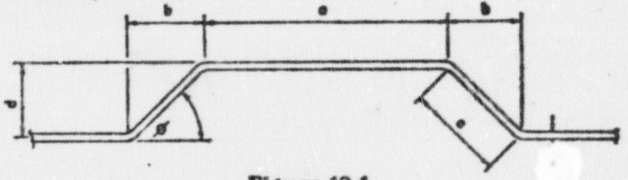

Figure 12.1

12.7.5 *Girders and Webs.*

(a) *Strength Requirements.*—Girders and webs which support bulkhead stiffeners are to have section moduli in centimeters cubed or in inches cubed as given by the formula in 7.1.3 where *l* is the span in meters or in feet measured between the heels of the end attachments. Where effective brackets are fitted, the length *l* may be modified as described in Section 25, Table 25.7. The value of **NG** for use with the formula is to be derived from the following:

$$NG = s \times h$$

Where:

s = The sum of half lengths in meters or in feet (on each side of girder or web) of the stiffeners supported.

h = The vertical distance in meters or in feet to the Bulkhead Deck at center from the middle of s in the case of girders, and from the middle of *l* in the case of webs; where that distance is less than 6.10 meters (20 feet), the value of h is to be .8 times the distance in meters plus 1.22 (feet plus 4).

The value of NG for girders and webs on collision bulkheads is to be at least 25 per cent greater than required for similar supporting members on ordinary bulkheads.

(b) *Proportions.*—Girders and webs are to have a depth not less than .0832 *l* (1 inch per foot of span *l*) plus one quarter of the depth of the slots for the stiffeners; the thickness is not to be less than 1 mm per 100 mm (.01 in. per inch) of depth plus 3 mm (.12 in.) but need not exceed 11.5 mm (.46 in.).

(c) *Bulkhead Connecting Angles.*—Bulkhead connecting angles are to be of the thickness of the webs and may be single riveted.

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(d) *Stiffener Connecting Clips.*—Stiffener connecting clips are to extend for the full depth of the web or girder at intervals not exceeding 2.74 meters (9 feet). Tripping brackets are to be fitted at intervals of about 3 meters (10 feet) and where the width of the face flange exceeds 200 mm (8 in.) on either side of the girder or web, these are to be arranged so as to support the flange.

12.7.6 *Attachments.*—Riveted stiffeners having no end attachments are to be welded for 152 mm (6 in.) around the ends, or are to overlap and be riveted to the boundary angles; clip and bracket attachments are to be as required by Section 25, Table 25.8; ends of bracketed stiffeners are to be clear of boundary angles. Angles connecting lower brackets to inner bottoms are to extend over the floor adjacent to the bulkhead. Where stiffeners cross horizontal girders they are to be attached by angle clips having the number of rivets as required for clip attachments. Girders and webs are to have end attachments as required by Section 25, Table 25.7

12.9 Watertight Doors.—Watertight doors are to be of ample strength for the water pressure to which they may be subjected. Door frames are to be carefully fitted to the bulkheads; where liners are required, the material is to be of such character as is not readily injured by heat or by deterioration. Doors in the lower parts of the vessel which may require to be opened at sea, are to be of the sliding type; they are to be carefully fitted to the frames and are to be tested at the maker's works. The closing gear is to be accessible in all cases and workable from above the Bulkhead Deck; the lead of shafting is to be as direct as possible and the screw is to work in a gun-metal nut; there is to be an index at the operating position to show whether the door is open or closed, and clearly marked with directions for closing the door. All other doors may be substantially constructed hinged doors fitted with gaskets and dogs spaced and designed to ensure that the opening may be closed thoroughly watertight.

Where stiffeners are cut in way of watertight doors, the openings are to be framed and bracketed so as to maintain the full strength of the bulkhead without taking the strength of the door frames into consideration.

12.11 Sluice Valves and Cocks.—Sluice valves and cocks are not to be fitted on collision bulkheads. They may be fitted only on other bulkheads under conditions where they are at all times accessible for examination; the control rods are to be workable from the Bulkhead Deck, and are to be provided with an index to show whether the valve or cock is open or shut. The control rods are to be properly protected from injury and their weight is not to be supported by the valve or cock.

12.13 Testing.—Testing of watertight bulkheads, recesses and decks is to be carried out after the completion of all work affecting the watertightness; a hose test is to be carried out under simultaneous inspection of both sides of the plating; the pressure of the water in the hose is not to be less than 2.11 kg per square centimeter (30 psi). In passenger spaces where certain items affecting the watertightness may require to be fitted after the installation of some of the finished trim, the requirements for hose testing may be modified.

Shaft tube compartments and fore peaks are to be tested with a head of water equal to the height of the load draft; the head for fore peaks is not to be less than two-thirds of the distance to D; where shaft tube compartments and fore peaks are used as tanks, the test heads are not to be less than required by 13.9. Chain lockers aft of the fore peak bulkhead are to be tested by filling with water.

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SECTION 29

VESSELS INTENDED TO CARRY ORE IN BULK

29.1 General.

29.1.1 *Classification.*—The classification ✠A1Ⓔ Ore Carrier may be assigned to seagoing vessels designed for the carriage of ore cargoes and built to the requirements of this Section and other relevant sections of the Rules.

29.1.2 *Application.*—These requirements are intended to apply to vessels with machinery aft and having one deck, two longitudinal bulkheads, a double bottom and the longitudinal framing system of construction.

29.1.3 *Arrangement.*—Watertight bulkheads in accordance with Section 12 are to be provided. Where it is intended to carry liquid in any of the spaces, additional bulkheads or swash bulkheads may be required. Tank bulkheads are to be in accordance with the requirements of Section 28. The depth of double bottom is not to be less than the height for center girders as obtained from Table 1 after correction as required by the footnotes. The depth is that corresponding to L or B, whichever is greater, where L is as defined in Section 2 and B may be taken as the distance between the longitudinal bulkheads at the bottom shell. It is recommended that flush inner-bottom plating be adopted throughout the cargo space and that the least thickness be 19 mm (.75 in.) at 510 mm (20 in.) spacing of longitudinals.

29.1.4 *Loading Manual.*—In general, a Loading Manual is to be prepared and submitted for review in the case of vessels for which still water bending moment calculations are required by 6.9. This manual is to show the effects of various loaded and ballasted conditions upon longitudinal bending moments and is to be furnished to the master of each vessel for guidance. Alternate methods of obtaining this information will be considered.

29.1.5 *Higher Strength Materials.*—In general, applications of higher strength materials for vessels intended to carry ore in bulk are to meet the requirements of this Section, but may be modified generally as outlined in the following sections of the Rules:

See Section 15 for shell plating, Section 16 for deck plating, Sections 7 and 10 for longitudinals, Section 13 for bulkhead plating, and Section 7 for deep longitudinal members.

29.3 Special Requirements for Deep Loading.

29.3.1 *General.*—Ore carriers to which freeboards are assigned based on the subdivision requirements of the International Convention on Load Lines, 1966 are to comply with 28.3, except that the requirements of 28.3.2 may be modified, depending upon the arrangement of hatchways, etc.

29.3.2 *Hatch Covers.*—Steel watertight hatch covers in accordance with 18.7.1, or covers of other metal and equivalent strength are to be provided for the exposed hatchways. Where flush hatch covers are fitted on the freeboard deck within the forward quarter length, the section modulus and moment of inertia are to be increased by 15 per cent of the values required by 18.7.1.

29.5 Hull Girder Strength.—The longitudinal hull girder section moduli, expressed in terms of centimeters squared meters or in inches squared feet are not to be less than required by the formulas given in 6.3.1.

29.7 Scantlings.—In general, the requirements of 28.17 through 28.33 inclusive are to be complied with, except as otherwise provided in the following paragraphs.

29.9 Transverses.—Transverse floors under the cargo hold are to be spaced not more than 3 meters (10 feet). Their thickness is to be as required by 7.3.5.

29.11 Inner Bottom Longitudinals.—The inner bottom longitudinals are to have section moduli in centimeters cubed or inches cubed obtained from the formula:

$$SM = 7.9 \times N \times l^2 \quad \textit{Metric Units}$$

$$SM = .0041 \times N \times l^2 \quad \textit{British Units}$$

Where:

$N = s \times h \times 1.75$

s = Spacing of longitudinals in meters or in feet.

h = Distance in meters or in feet from the inner bottom to the deck at centerline.

l = The spacing of the floors in meters or in feet.

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Where the density of ore to be carried is greater than about 2400kg per cubic meter (150 lb. per cubic foot), the value of N is to be increased in the ratio of the actual density to 2400kg per cubic meter (150 lb. per cubic foot). The depth of inner bottom longitudinals is not to be less than one tenth of their span.

29.13 Shell Plating.

29.13.1 ***Shell Plating.***—Shell plating within the midship .4L is to be of not less thickness than is required for purposes of longitudinal girder strength in accordance with 6.3.1; nor is it to be less than is required by Table 28.1 of Section 28, for minimum thickness of shell plating. Where the spacing of frames exceeds that given in the Table, the thickness of the bottom and side plating is to be increased by one per cent of the increase in spacing (.01 in. for each one inch increase in spacing). Where the spacing of longitudinals is less than that given in the Table in vessels of more than 122 meters (400 feet) length, the thickness of the bottom and side plating may be reduced at the same rate but the thickness is not to be less than would be required at a spacing of 760 mm (30 in.). In addition, the bottom shell may be reduced by an amount equal to the "single bottom addition" as provided in Table 1, multiplied by the ratio of the width of inner bottom to the beam of the vessel. This reduction is not to be taken where the depth of double bottom exceeds 1.5 times the rule depth.

29.13.2 ***Flat Plate Keel.***—Where the reduction in bottom shell is taken for the presence of an inner bottom as provided in 29.13.1, the flat keel may also be reduced by the same correction.

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Exhibit 45

(1969 ABS Rule 43)

SECTION 4

SURVEYS AFTER CONSTRUCTION

PART I
VESSELS IN SALT WATER SERVICE

43.1 General Conditions.

43.1.1 *Notification.*—The Surveyors are to have access to classed vessels at all reasonable times. Owners or their representatives are to notify the Surveyors on all occasions when a vessel can be examined in dry dock or on a slipway. If at any visit a Surveyor should find occasion to recommend repairs or further examination intimation is to immediately be made to the owners or their representatives in order that appropriate action may be taken.

43.1.2 *Damage.*—Damage to hull, machinery or equipment which affects or may affect seaworthiness or classification, is to be submitted by the owners or their representatives for examination by the Surveyors. All repairs found necessary by the Surveyors are to be carried out to their satisfaction.

43.1.3 *Availability for Survey.*—The Surveyors are to undertake all surveys on classed vessels at the request of the owners or their representatives and are to report thereon to the Committee. They are to avail themselves of every convenient opportunity for carrying out periodical surveys in conjunction with damage and repair surveys in order to avoid unnecessary duplication of work.

43.1.4 *Annual Surveys.*—Annual Surveys are to be made during each year of service.

43.1.5 *Special Periodical Surveys.*—For vessels built under Classification Survey, the first Special Periodical Survey becomes due four years after the date of build. For other vessels, a Special Periodical Survey becomes due four years from the date of the Special Survey for Classification. Subsequent Special Periodical Surveys are due four years after the crediting date of the previous Special Survey. The interval between Special Surveys may be reduced by the Committee. If a Special Survey is not completed at one time, it will be credited as of the end of that period during which the greatest part of the survey has been carried out. Special consideration may be given to Special Periodical Survey requirements in the case of vessels of unusual design.

43.1.6 *Continuous Surveys.*—At the request of the owner, and upon approval of the proposed arrangements, a system of Continuous Surveys may be undertaken whereby the Special Survey requirements are carried out in regular rotation to complete all the requirements of the particular Special Survey within a five year period. For Continuous Surveys, a suitable notation will be entered in the Record and the date of completion of the cycle published. If any defects are found during the survey, they are to be examined and dealt with to the satisfaction of the Surveyor.

43.1.7 *Year of Grace.*—To be eligible for the year of grace to complete the Special Survey within one year after the due date, the vessel is to be presented for survey at about the due date of the Special Survey. The requirements for surveys to qualify for a period of grace are to be specially considered in each case and may include drydocking or gauging or both. If the survey is satisfactory, the completion of the Special Survey may be deferred for a period not exceeding twelve months, provided the whole Special Survey is satisfactorily completed within five years from date of build or from the date recorded for the previous Special Survey.

43.1.8 *Reactivation Surveys.*—In the case of vessels which have been laid up for an extended period the requirements for surveys on reactivation are to be specially considered in each case, due regard being given to the status of surveys at the time of the commencement of the lay-up period, the length of the period and the conditions under which the vessel had been maintained during that period.

43.1.9 *Incomplete Surveys.*—When a survey is not completed, the Surveyors are to report immediately upon the work done in order that owners and the Committee may be advised of the parts still to be surveyed.

43.1.10 *Premature Commencement*—Special Survey.—When circumstances cause a Special Survey to be commenced before it is due, the entire survey is to be completed within a period of twelve months if such work is to be credited to the Special Survey.

43.1.11 *Alterations.*—No structural alterations which affect or may affect seaworthiness, classifica-

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tion or the assignment of load lines are to be made to the hull or machinery of a classed vessel unless plans of the proposed alterations are submitted and approved by the Committee before the work of alterations is commenced and such work when approved is carried out under the supervision of the Surveyors to the Bureau.

43.1.12 *Special Materials.*—Welding shall not be performed on higher-strength steels of the hull structure nor repairs or renewals commenced on such plating or adjacent to such plating without thorough and careful reference to the recommendations contained in 3.1 with respect to higher strength steels. Substitution of higher-strength steels differing from those originally installed is not to be undertaken without approval.

43.1.13 *Drydocking Survey.*—An examination of each classed vessel is to be made in dry dock at intervals of about twelve months, but the maximum interval is not to exceed two years. For vessels operating in salt water for less than six months each year, the maximum interval is not to exceed three years. Proposals for alternate means for providing underwater inspection equivalent to Drydocking Survey will be considered for vessels of unusual design or in special service having special protective coatings or impressed current protection.

43.3 Annual Surveys—Hull.

43.3.1 *Parts to be Examined.*—At each Annual Survey between Special Surveys the following parts are to be examined, placed in good condition, and reported upon:—

(a) All parts of the steering arrangements, including the gear, quadrants, tillers, blocks, rods, chains, telemotor or other transmission gear and brakes.

(b) Sluice valves, watertight doors in bulkheads and vessel's sides, closing appliances in superstructure bulkheads and for air and sounding pipes.

(c) Coamings of ventilators to spaces below the Freeboard Deck and below decks of superstructures which are intact or closed by closing appliances; hatchway coamings, tarpaulins, hatch covers and all their supports.

(d) All parts particularly liable to rapid deterioration.

(e) Machinery casings, guard rails and all other means of protection provided for openings and for access to crew's quarters.

(f) Freeing port doors in bulwarks of enclosed wells in freeboard and superstructure decks are to be examined and their hinges put in good order; fittings for securing shutters are not to prevent the shutters from opening in the event of a substantial amount of water coming aboard.

(g) The holds and 'tween decks of vessels engaged in the dry bulk cargo trade, at each Annual Survey after Special Survey No. 3.

43.3.2 *Special Load Lines.*—Where vessels have timber, tanker or special load lines, an examination is to be made of the structural arrangements, fittings and appliances upon which such load lines are conditional.

43.3.3 *Position of Load Lines.*—The Surveyors are to satisfy themselves at each Annual Survey that no material alteration has been made in the hull, superstructures or means of closing openings in superstructures which affects the position of load lines.

43.5 Intermediate Surveys on Older Ships.—At a survey approximately two (2) years after the Special Survey No. 3 and each subsequent Special Survey has been credited for a tanker, and the Second Special Survey No. 1 and each subsequent Special Survey has been credited for a dry cargo vessel, in addition to the parts outlined in 43.3.1, the following are to be examined, placed in good condition, and reported upon:

(a) For tankers—some of the cargo tanks (internally).

(b) For dry cargo vessels—some of the holds (internally).

(c) For both types of vessels—the Surveyors are to examine as they deem necessary any parts of the structure in addition to (a) or (b) subject to damage or wastage.

43.7 Special Periodical Surveys—Hull.

43.7.1 *Special Periodical Survey No. 1.*—Special Periodical Survey No. 1 is to include compliance with all Annual Survey requirements, and the Surveyors are to satisfy themselves, by examination in position, that all means of protection to openings are in good condition and are readily accessible. Effect also is to be given to the following requirements:

(a) The vessel is to be placed in dry dock or upon a slipway and the keel, stem, stern frame or stern post and outside plating are to be cleaned and afterward examined. Load line marks are to be checked and re-cut or painted as required.

(b) The rudder is to be examined and lifted when required and the gudgeons rebushed.

(c) Particular attention is to be given to over-

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board discharges, ash chutes and all other openings in the shell, casings being removed so that a proper examination can be made.

(d) The holds, 'tween decks, deep tanks, peaks, bilges, engine and boiler spaces and coal bunkers are to be cleaned out and the surfaces of the framing and plating are to be cleaned and examined.

(e) All watertight bulkheads are to be examined.

(f) Close ceiling in holds and coal bunkers of single bottom vessels is to be lifted to the extent of at least two strakes on each side (one strake being at the bilge) and all portable hatches in holds and the flooring plates in machinery spaces are to be removed for internal examination of the bottom framing and plating.

(g) The cement or other composition on the inner surface of the bottom plating is to be carefully examined and sounded to ascertain if it is adhering satisfactorily to the plating.

(h) Where a double bottom is fitted, the tanks and cofferdams are to be thoroughly cleaned out and examined internally; sufficient ceiling is to be lifted from the double bottom to enable the Surveyors to satisfy themselves as to the condition of the tank top plating, and if necessary all ceiling is to be removed for cleaning and coating the top plating. Requirements for tanks used exclusively for permanent ballast, and which are fitted with an effective means for corrosion control, are to be specially considered.

(i) Where double bottom and other tanks are used exclusively for fuel oil, the gas freeing and internal cleaning and examination may be waived, except for the fore and after peak tanks, provided that, upon a general external examination of the tanks, the Surveyors find their condition to be satisfactory.

(j) Double bottom tanks are to be tested with a liquid head corresponding to the load draft of the vessel; oil double bottoms, deep tanks in holds or peaks are to be tested to the highest point to which water or oil fuel may rise under service conditions or to the load line, if that be higher. For deep tanks designed and used for the carriage of liquid cargoes, an alternate means of testing may be approved provided the Surveyors are satisfied with the internal and external condition of the tanks and associated structure.

(k) The Surveyors are to see that a thick steel plate is securely fixed below each sounding pipe for the rod to strike upon.

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(l) The decks are to be examined and deck compositions should be examined and sounded, but need not be disturbed if found to be adhering satisfactorily to the plating.

(m) The hawse pipes are to be examined and the required complement of anchors verified. Chain cables are to be examined if they are ranged.

(n) The efficiency of hand pumps is to be tested and sanitary and other discharges through the vessel's side are to be examined, such casings as prevent proper inspection being removed for this purpose.

(o) In insulated cargo spaces all limbers and hatches are to be removed and the plating examined.

(p) Steel cargo hatch covers not fitted with tarpaulins are to be hose tested or otherwise proven tight.

43.7.2 ***Cleaning of Tanks and Their Testing in Tank Vessels.***—In vessels intended for the carriage of oil in bulk, the tanks must be thoroughly cleared of gas and cleaned before inspection, and every precaution is to be taken to insure safety during inspection. Where fitted, anodes and their attachments are to be examined. The bulkheads at the ends of cargo tank spaces are to be tested with a head of liquid up to the top of the expansion trunk or, if specifically approved, by an alternate method. The Surveyor is to be satisfied as to the tightness of the remaining cargo tank bulkheads.

43.7.3 ***Special Periodical Survey No. 2.***—Special Periodical Survey No. 2 is to include compliance with all requirements for Special Periodical Survey No. 1 and with those which follow.

(a) Close ceiling in vessels with a single bottom is to be lifted to an extent which permits all material below the ceiling to be properly examined; in vessels with double bottom tanks sufficient ceiling and flooring is to be lifted to enable the Surveyors to satisfy themselves as to the condition of the material in tank tops, bulkheads, tunnels, side framing and piping.

(b) All double bottom and other tanks and cofferdams are to be thoroughly cleaned out and examined internally. In cases where the double bottom tanks are used exclusively for fuel oil, a forward double bottom tank is to be gas freed, thoroughly cleaned out and examined internally and, if found satisfactory, the gas freeing and cleaning of the remaining double bottom oil tanks may be waived, provided that, upon a general external examination of the tanks, the Surveyors find their condition satisfactory. Likewise the gas freeing, cleaning and internal exam-

Exhibit 49

(Chart)

[PHOTOSTAT]

(Opposite ☛)

OVERSIZE FOLDOUT(S) FOUND HERE IN
THE PRINTED EDITION OF THIS VOLUME
ARE FOUND FOLLOWING THE LAST PAGE
OF TEXT IN THIS MICROFICHE EDITION

SEE FOLDOUT NO. 4 (J 477)

J 478a

Bendix

Exhibit 51E

(Table of Weather Data in Pacific)

II. (a) Reconstruction of track made good by M/V ANTONIOS DEM DES from Panama Canal to 33N 157.5E

ATD Panama Canal 1/14/70 (1700L) (2200Z)

Last Position 33N 157.5E 2/07/70 (0500L) (06/1900Z)

DTG 1970	Lat.	Long	Wind (Knots)	Sea (Feet)	Swell (Feet)
1/15/LN	7.0N	81.8W	Vrbl.-NE/10	Vrbl/1-1/2	ESE/4-1/2
1/16/LN	8.3N	87.5W	Vrbl./Light	Calm	Conf./3
1/17/LN	9.6N	93.4W	NNW/5	NNW/1-1/2	Conf/3
1/18/LN	10.8N	99.1W	NNW/5	NNW/1-1/2	NW/3
1/19/LN	12.0N	105.0W	NNE/5	NNE/1-1/2	NW/4-1/2
1/20/LN	13.1N	111.0W	NNE/10	NNE/3	NNE/4-1/2
1/21/LN	14.3N	117.0W	NNE/15	NNE/4-1/2	NE/6
1/22/LN	15.5N	123.0W	NE/15	NE/4-1/2	NE/6
1/23/LN	16.7N	128.8W	ENE/10	ENE/3	NE/6
1/24/LN	17.8N	134.6W	ENE/15	ENE/4-1/2	ENE/6
1/25/LN	18.9W	140.5W	E/20	E/4-1/2	E/6
1/26/LN	20.2N	146.5W	E/15	E/4-1/2	E/4-1/2
1/27/LN	21.7N	152.1W	E/15-20	E/4-1/2	Conf./6
1/28/LN	23.0N	157.9W	ENE/15	ENE/4-1/2	NW/6
1/29/LN	24.7N	163.3W	ESE/15	ESE/3	NW/4-1/2
1/30/LN	26.3N	168.7W	S/20	S/4-1/2	NW/4-1/2
1/31/LN	28.1N	174.1W	NNW/30	NNW/9	NW/12
2/01/LN	29.9N	179.6W	SE/20	SE/4-1/2	Conf.-S/9
2/03/LN	30.8N	174.4E	SW/35	SW/12	SW/13-1/2
02/04/LN	31.5N	168.0E	W/35-40	W/10-1/2	W'ly/15
2/05/LN	32.1N	162.0E	WSW/20-15	W'ly/7-1/2	WNW/12
2/06/LN	32.8N	158.0E	WNW/40-45	WNW/15	WNW/25
2/07/05L*	33.3N	157.5E	NW/40-45	NW/13-1/2	NW/21-1/2

* Time of "SOS" = 2/07/0500L

Exhibit 51M
(Table of Data for Exhibits 51C-51L)

A closer examination of weather encountered by M/V ANTONIOS DEMADES, after passing the Dateline, follows. The values indicated for wind, sea and swell denote maximum conditions for vessel's positions.

DTG L/T 1970	DTG GMT	Lat.	Long.	Wind (Knots)	Wind Force	Sea (Feet)	Swell (Feet)
2/01/LN	02/00Z	29.9N	179.6W	SE/20	5	SE/4-1/2	Conf. -S/9
2/03/00L	02/12Z	30.3N	177.6E	SSW/25	6	SSW/7-1/2	SW/10-1/2
2/03/LN	03/00Z	30.8N	174.4E	SW/35	7-8	SW/12	SW/13-1/2
2/04/00L	03/12Z	31.1N	171.2E	WSW/30	7	WSW/12	W'ly/13-1/2
2/04/LN	04/00Z	31.5N	168.0E	W/35-40	8	W/10-1/2	W'ly/15
2/05/00L	04/12Z	31.8N	164.7E	NW/25	6	NW/7-1/2	NW/12
2/05/11L	05/00Z	32.1N	162.0E	WSW/20-15	5-4	W'ly/7-1/2	WNW/12
2/05/23L	05/12Z	32.5N	159.8E	SSW/25	6	SSW/7-1/2	SW/10-1/2
2/06/05L	05/18Z	32.7N	158.9E	W/40	8	W/10-1/2	W/18-19-1/2
2/06/11L	06/00Z	32.8N	158.0E	WNW/40-45	8-9	WNW/15	WNW/25-28
2/06/17L	06/06Z	32.9N	157.9E	WNW/40	8	WNW/15	WNW/25
2/06/23L	06/12Z	33.0N	157.8E	WNW/40-35	8-7	WNW/13-1/2	NW/22-1/2
2/07/05L*	06/18Z	33.3N	157.5E	NW/40-45	8-9	NW/13-1/2	NW/21-1/2

Wind force in knots
Sea and Swell height in feet.

* Time of "SOS" 2/07/0500L

EXHIBIT # 51-

Exhibit 53

(Calculations of Naval Architect Gilbert)

[PHOTOSTATS]

(Opposite) ☛

M.V. "ANTONIOS DEMADES"

WEIGHT CALCULATION

ITEM	WEIGHT METRIC TON	VCG m	MOMENT MT TM	FWD LVR	FWD MT	AFT LVR	AFT MT
LIGHT SHIP + C&E+STR & LO.	8,257.6	9.35	77,208.6			11.60	95,788.0
CARGO	25,564.8		173,585.0	6.07	155,071.4		
FRESH WATER							
FEED WATER	264	0.70	18.5			75.70	1,998.5
POTABLE WATER FWD	25.9	15.00	388.5	21.78	564.1		
" " AFT	29.0	12.85	372.7			83.73	2,428.2
FUEL OIL FWD DB	168.0	0.54	90.7	66.68	11,202.2		
SIDE TKS							
SETTLERS	158.1	13.29	2,101.0			72.03	13,505.8
DAY TANKS							
DIESEL OIL DBL BOTT							
DAY TKS	40.6	13.35	542.0			69.00	2,801.4
BALLAST	140.9	1.00	140.9	51.11	7,201.4		
SNOW & ICE	50.8	16.00	812.8	-		-	
MISC.	108.9	7.41	806.9	1.669	181.8		
					174,220.9		116,521.9
					116,521.9		
TOTAL METRIC	34,571.	7.41	256,067.6	1.669	57,699.0		
TOTAL ENGLISH	34,025	24.31		5.48			

CALCULATIONS

TRIM TAN = $\frac{10.887 - 10.543}{179.68 - (.5 + .4)} = 0.00192$

KEEL CORR. = 0.028 m

DRAFT FWD PERP = $10.543 - .00192 \times .4 - .028 = 10.514$ m.

DRAFT AFT PERP = $10.887 + .00192 \times .5 - .028 = 10.860$ m.

DRAFT AT LCF = $\left(\frac{10.514 + 10.860}{2}\right) + 0.00192 \times 2.665 + 0.092 = 10.784$ m.

CT3-1

Ex. 53

CONDITION: DEPARTURE BOSTON

DRAFT STATEMENTS

ITEM	METRIC	ENGLISH
DRAFT FWD	10.543	34-07.0
DRAFT AFT	10.887	35-08.5
DRAFT MEAN	10.713	35-01.75
DRAFT MIDSHIP PORT	10.262	33-08.0
DRAFT MIDSHIP STBD	11.405	37-05.0
DRAFT MIDSHIP MEAN	10.834	35-06.5
MEAN OF MEANS	10.774	35-04.125
DRAG CORR (0.75·δf)	0.093	0-03.563
DRAFT CORRECTED	10.810	35-05.31
DISPLACEMENT		
TONS / INCH	91.37	90.52
TRIM (AFT)	+0.345	1.13
MT. TO TRIM	41,990	3444. FT TONS / IN
LCB (FWD)	-2.089	-6.85
LCF (AFT)	+2.665	+8.74
TRIM CORR (CALC. AT LCF DRAFT)	—	—
DISPLACEMENT CORRECTED (M³)	33,728	33,195 FW
DENSITY	1.025	
DENSITY CORRECTION	343	830
DISPLACEMENT	34,571	34,025
LCG (FWD)	-1.669	

SIN OF HEEL $\phi = \frac{11.405 - 10.262}{22.79} = 0.0502$

STABILITY

	METRIC	FT.
KM_T	= 9.67	= 31.73
KG_T	= 7.41	= 24.31
GM_T	= 2.26	= 7.42
FREE SURFACE	= -	= -
GM_T CORR	= 2.26	= 7.42
TCG	0.113	0.37
TRANS MOMENT	3906.5	
HEEL TAN	0.0502	
HEEL DEGREES	2.88° STBD	
HEEL		

JOHN J. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS — MARINE ENGINEERS
50 COMMERCIAL WHARF BOSTON, MASS. 02110

DRAWN BY
CHECKED BY
DATE MAR 1 1975
SCALE

DWG NO C-186-4

M.V. "ANTONIOS DEMADES"

WEIGHT CALCULATION

ITEM	WEIGHT METRIC TON	KG M	MOMENT MT TM	FWD LCG	FWD MT.	AFT LCG	AFT MT.
LIGHT SHIP + C&E+STR & S.D.	8257.6	9.35	77,208.6			11.60	95,788.0
CARGO	25,564.8	6.79	173,585.0	6.07	155,071.4		
FRESH WATER							
FEED WATER							
POTABLE WATER FWD	10.0	14.60	146.0	21.78	217.8		
" " AFT	5.3	12.60	65.5			83.73	435.4
FUEL OIL FWD DB							
SIDE TKS							
SETTLERS	59.4	13.23	785.9			71.59	4,252.4
DAY TANKS	40.6	13.38	543.2			75.78	3,076.7
DIESEL OIL DBL BOTT							
DAY TKS	18.7	13.30	248.7			69.0	1,290.3
BALLAST OR MISC.	319.7	14.26	5,863.7	38.84	12,415.8		
MISC.							
					167,705.0		104,842.8
TOTAL METRIC	34,276	7.54	258,446.6	1.836	62,962.2		
TOTAL ENGLISH	33,734	24.73		6.022			

CALCULATIONS

TRIM TAN = $\frac{0228}{175.68 - (.5 + .4)} = 0.00128$

KEEL CORR. = 0.029 m

DRAFT FWD MLD $10.516 - 0.4 \times .00128 - 0.029 = 10.487$ M MLD

DRAFT AFT MLD $10.744 - 0.5 \times .00128 - 0.029 = 10.717$ M MLD

T3-2

CONDITION: ARRIVAL CRISTOBAL 2

DRAFT STATEMENTS

ITEM	METRIC	ENGLISH
DRAFT FWD	10.518	34-06.0
DRAFT ART	10.747	35-03.0
DRAFT MEAN	10.640	34-10.5
DRAFT MIDSHIP PORT	–	–
DRAFT MIDSHIP STBD	–	–
DRAFT MIDSHIP MEAN	10.753	35-03.25
MEAN OF MEANS		
SAG CORR (0.75 · δd)	0.093	0-03.563
DRAFT CORRECTED	10.695	35-02.06
DISPLACEMENT SW	34,276	33,734
TONS / INCH	91.70	90.25
TRIM	0.228	0-3.0
MT. TO TRIM	41,780	
LCB	- 2.120 f	
LCF	+ 2.522 a	
TRIM CORR	AT LCF	
DISPLACEMENT CORRECTED	34,276	33,734
DENSITY	1.025	1.025
DENSITY CORRECTION	–	
DISPLACEMENT	34,276	33,734
LCG	- 1.834 f	

STABILITY

KM_T	= 9.640 = M.	FT.
KG_T	= 7.540 =	
GM_T	= 2.100 =	
FREE SURFACE	= N.I =	
GM_T CORR	=	=
TCG	NIL	
TRANS MOMENT		
HEEL TAN		
HEEL DEGREES		
HEEL		

JOHN W. GILBERT ASSOCIATES, INC.

DRAWN BY	[illegible]
CHECKED BY	
DATE	MAR 1 1975
SCALE	NONE
DWG NO	C-186-4 [illegible]

M.V. "ANTONIOS DEMADES"

WEIGHT CALCULATION

ITEM	WEIGHT METRIC TONS	VCG	VERT MT FM	FWD LCG	FWD LM	AFT LCG	AFT MT
LIGHT SHIP + CREW & EFF.	8257.6	9.35	77,298.6			11.60	95,788.0
CARGO	25,564.8	6.79	173,585.0	6.07	155,071.4		
FRESH WATER							
FEED WATER							
POTABLE WATER FWD	32.4	15.71	509.0	21.78	705.7		
" " AFT	33.6	13.20	443.5			83.73	2813.3
FUEL OIL FWD DB	222.9	0.68	151.6	66.71	14,869.7		
SIDE TKS	641.1	9.53	6109.7			57.75	37,023.5
SETTLERS							
DAY TANKS	158.1	13.29	2101.1			72.03	11,387.9
DIESEL OIL DBL BOTT	77.2	1.21	93.4			61.5	4,747.8
DAY TKS	48.8	13.37	652.5			69.0	3,367.2
BALLAST OR MISC	319.7	14.26	4558.9	38.84	13,415.8		
MISC.							
					183062.6		155,1277
TOTAL METRIC	35356.2	7.51	265,413.3	0.79	27,934.9		
TOTAL ENGLISH	34797.9	24.63		2.59			

CALCULATIONS

TRIM TAN $\frac{11.464 - 10.469}{179.68 - (.4 + .5)} = .00553$

KEEL CORR. = 0.028 m

DRAFT FWD

DRAFT AFT

T3-3

CONDITION: DEPARTURE CRISTOBAL

DRAFT STATEMENTS

ITEM		METRIC	ENGLISH
FT FWD		10.408	34'-1 3/4"
FT AFT		11.410	37'-5 3/16"
FT MEAN		10.909	35'-9 1/2"
FT MIDSHIP PORT			
FT MIDSHIP STBD			
FT MIDSHIP MEAN		11.009	36'-2 3/16"
N OF MEANS		10.159	35.99
CORR (0.75 · Sd)		0.092	3 5/8"
AFT CORRECTED		11.101	36'-1 1/8"
PLACEMENT			
NS / INCH			
IM	(AFT)	1.007	
TO TRIM		42,476.	
B	(FWD)	2.00	
F	(AFT)	2.08	
IM CORR	(CALC ABOUT LCF)	—	—
SPLACEMENT CORRECTED		34,493.9	
NSITY		1.025	
NSITY CORRECTION		862.3	
SPLACEMENT		35,356.2	34,797.9
CG	(FWD)	0.79	2.59

STABILITY

		M.	FT.
KM_T	=	9.71	31.86
KG_T	=	7.51	24.63
GM_T	=	2.20	7.23
FREE SURFACE	=	—	=
GM_T CORR	=	2.20	7.23
TCG		NIL	
TRANS MOMENT			
HEEL TAN			
HEEL DEGREES			
HEEL			

FEMME

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS — MARINE ENGINEERS
58 [illegible] BOSTON, MASS. 02[illegible]

DRAWN BY
CHECKED BY
DATE MAR 1 [illegible]
SCALE

DWG NO C-[illegible]

M.V. "ANTONIOS DEMADES"

WEIGHT CALCULATION

ITEM	WEIGHT METRIC TON	VCG M	VERT MT TM	FWD LVR	FWD MT	AFT LVR	AFT MT
LIGHT SHIP + C&E+STR & LO	8257.6	9.35	77,209.2			11.6	95,788.2
CARGO	25564.8	6.79	175,585.0	6.07	155,071.4		
FRESH WATER							
FEED WATER							
POTABLE WATER FWD	25.0	15.2	380.0	21.78	544.5		
" " AFT	26.2	12.8	335.4			83.73	2193.7
FUEL OIL FWD DB	35.9	0.2	7.2	66.71			
SIDE TKS	641.1	9.53	6109.7			57.75	35,101.4
SETTLERS							
DAY TANKS	158.1	13.29	2101.0			73.03	13,505.8
DIESEL OIL DBL BOTT	69.0	1.10	74.8			61.5	4182.0
DAY TKS	48.9	13.37	625.72			69.0	3,229.2
BALLAST OR MISC	319.7	14.26	4558.92	38.94	12,415.8		
MISC.					168 031.7		154,000.1
TOTAL METRIC	35,145.2	7.60	266,395.7	6.40	14031.6		
TOTAL ENGLISH	34,590.3						

CALCULATIONS

TRIM TAN = $\frac{1.369}{179.68 - (.4 + .5)}$ = 0.0076

KEEL CORR. = 0.029 m

DRAFT FWD 10.95 − 0.7062 − 0.029 − 0.090 + .127 = 10.159
(1/2 LBP) TRIM × MCF SAG KEEL

DRAFT AFT 10.95 + 0.6627 − 0.029 − 0.090 + 0.027 = 11.521

TB-4

B.H.

CONDITION ARRIVAL SUMMER 20 JE

DRAFT STATEMENT

ITEM	METRIC	ENGLISH
DRAFT FWD	10.153	33-3.52
DRAFT AFT	11.527	37-9.70
DRAFT MEAN	10.843	35-7.11
DRAFT MIDSHIP PORT		35-10.3
DRAFT MIDSHIP STBD		35-10.3
DRAFT MIDSHIP MEAN	10.993	35-10.3
MEAN OF MEANS		
DAG CORR (0.75 · δd)	0.092	0-3.56
DRAFT CORRECTED	10,841	36-0.67
DISPLACEMENT	34,998.1	34,438.7
TONS / INCH	t/cm 35.79	30.9
TRIM	1.269	4-6.0
MT. TO TRIM	42,350	
LCB	2.05 fwd	
LCF	2.86 aft	
TRIM CORR 0.0319	137.10	134.6
DISPLACEMENT CORRECTED	35,145.2	34,590.3
DENSITY	1.025	
DENSITY CORRECTION	—	
DISPLACEMENT	35,145.2	34,590.3
LCB	0.40	

DRAFT CORR 36' - 0 5/8"
SUMMER LOAD LINE 35 - 7 5/8
OVER DRAFT 0 - 1"

STABILITY

	M.	FT.
KM_T	9.71	
KG_T	7.60	
GM_T	2.11	
FREE SURFACE	—	
GM_T CORR		
TCG	NIL	
TRANS MOMENT		
HEEL TAN		
HEEL DEGREES		
HEEL		

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS & MARINE ENGINEERS
50 GUILD ST. NEW YORK BOSTON, MASS. 02116

DRAWN BY	JWG [illegible]
CHECKED BY	JWG
DATE	MAR 1 1975
SCALE	NONE
DWG NO	C-156-[illegible]

M.V. ANTONIOS DEMADES

WEIGHT CALCULATION

ITEM	WEIGHT METRIC TON	VCG m	VERT MOM TM	FWD LCG	FWD MTS	AFT LCG	AFT MTS
LIGHT SHIP + CONSTANT & D.O.	9257.6	9.35	77,208			11.6	95,768.0
CARGO	25,564.8	6.79	175,985.0	6.07	155,871.4		
FRESH WATER							
FEED WATER							
POTABLE WATER FWD	3.0	14.5	43.5	21.78	65.3		
" " AFT	4.0	11.5	46.0			83.73	335.0
FUEL OIL FWD DB							
SIDE TKS	35.7	4.0	142.8			57.75	2061.7
SETTLERS							
DAY TANKS	156.1	13.29	2101.0			73.03	13,505.8
DIESEL OIL DBL BOTT	40.0	0.70	29.0			61.50	2640.0
DAY TKS	48.8	13.37	625.72			69.0	3,279.2
BALLAST OR MISC	319.7	14.26	4558.92	38.84	12415.8		
MISC.							
					167552.5		117559.7
TOTAL METRIC	34,431.7	7.56	260339.1	1.45	49,992.9		
TOTAL ENGLISH	33,888.0						

CALCULATIONS

TRIM TAN = $\frac{\quad}{175.68 - (\quad + \quad)}$ =

KEEL CORR. = 0.028 m

DRAFT FWD 10.76 − 0.23 − Nil − 0.090 + 0.027 = 10.467

DRAFT AFT 10.76 − 0.22 − Nil − 0.090 + 0.027 = 10.590

FB-5

CONDITION AT TIME OF CASUALTY

DRAFT MEASUREMENTS	METRIC	ENGLISH
F. FWD	10.517	34-5.9
F. AFT	10.867	35-7.7
F. MEAN	10.690	35-0.8
F. MIDSHIP PORT		
F. MIDSHIP STBD		
F. MIDSHIP MEAN	10.812	35-5
OF MEANS		
CORR. (0.75 - 5d)	0.092	0-3.56
F CORRECTED	10.78	35-4.36
LACEMENT	34,431.7	33,888.0
/INCH	M/cm 35.64	90.52
M.	0.354 M	1.16 FT
TO TRIM	43,700	
	2.09 fwd	
	2.63 fwd	
M CORR	NIL	NIL
LACEMENT CORRECTED		
SITY	34,431.7	33,888.0
SITY CORRECTION NO	1.025	
LACEMENT	34,431.7	33,888.0
G	1.45 fwd	

STABILITY

	Metric	Ft.
KMT	9.67	
KGT	7.56	
GMT	2.11	
FREE SURFACE		
GM CORR		
TCG	NIL	
TRANS MOMENT		
HEEL TAN		
HEEL DEGREES		
HEEL		

9,354
θ = .00197

13 1/2 D
10 1/8 D
35 10 D

flood this tube

JOHN W. GILBERT ASSOCIATES, INC
NAVAL ARCHITECTS & MARINE ENGINEERS
BOSTON, MASS. 02110

DRAWN BY
CHECKED BY JWG
DATE MAR 1, 1975
SCALE NONE

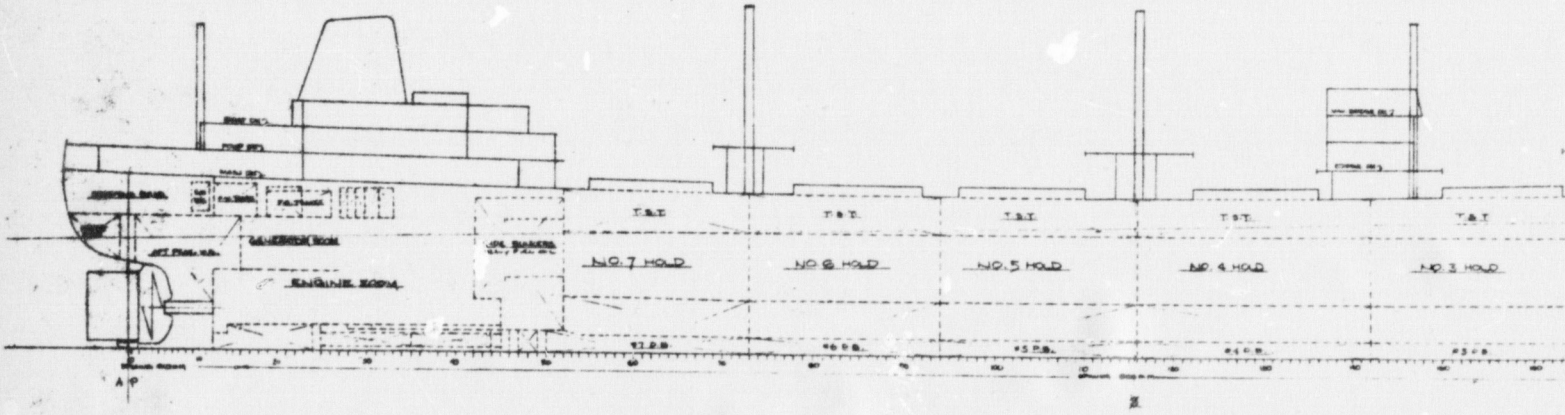
DWG NO C-186-4-1660

Exhibit 54

(Flooded Condition Drawings by Naval Architect Gilbert)

[PHOTOSTATS]

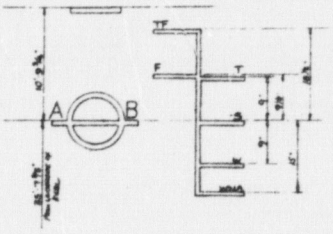
(Opposite) ☛



84-1

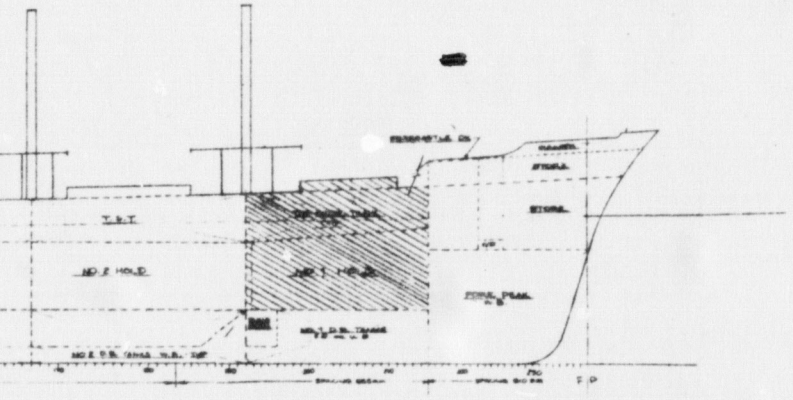
#54

PLIMSOLL MARK
1" = 1'-0"



BULK CARRIER
ANTONIOS DEMADES
MAIN PARTICULARS

	FT - INCHES	METRES
LENGTH OVERALL	588' - 1 3/4"	181.66
LENGTH B.P.	581' - 4 1/2"	179.68
BREADTH MOULDED	74' - 0 3/4"	22.79
DEPTH MOULDED	46' - 8 3/4"	14.18
DRAFT	35' - 5 1/4"	10.84
DEADWEIGHT	39,135 LONG TONS	39,554 METRIC TONS
MAIN ENGINE	FIAT B.T.V 8.8	11,800 BHP
RPM	136	
GROSS TONNAGE	15,977	
NET TONNAGE	10,479	



CONDITION I

HOLD NO 1 FILLED 2291.4 MT
DISPLACEMENT 36,621 M³

DRAFT FWD	13.18 M.	43'-2 7/8"
DRAFT AFT	10.02 M.	32'-10 1/2"
GMT CORR.	2.38 M.	7'-9 11/16"
FREEBOARD MIN	~ 2.30 M.	~ 7'-3 3/4"

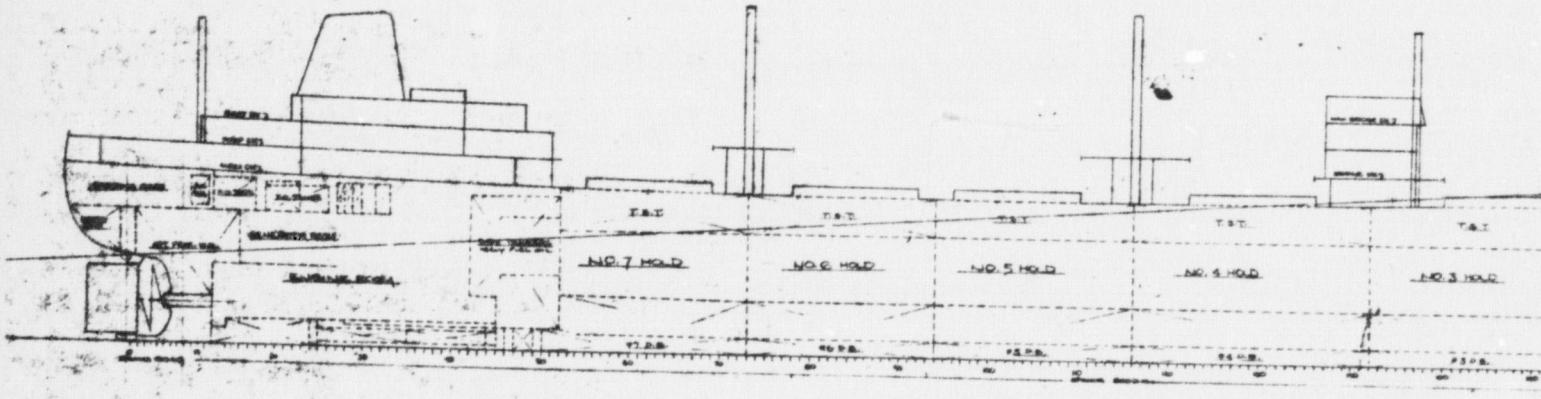
ALT	DESCRIPTION	DATE	APPD

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
56 COMMERCIAL WHARF BOSTON, MASS. 02110

"ANTONIOS DEMADES"

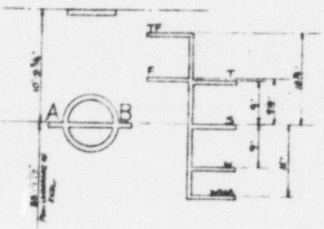
PROFILE

DRAWN BY [illegible] DATE 4/-/58
CHECKED BY [illegible] DATE 1/-/58
APPROVED BY DATE
SCALE 1-600
DWG. No. C186-2 ALT. 0 SH.


NO. 7 HOLD
NO. 6 HOLD
NO. 5 HOLD
NO. 4 HOLD
NO. 3 HOLD

PLIMSOLL MARK

1" = 1'-0"

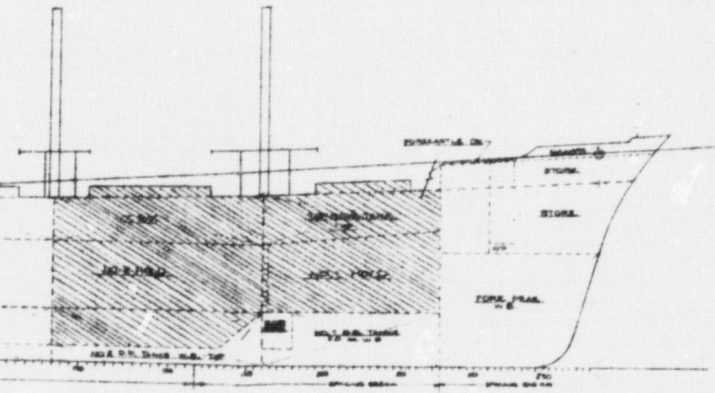


BULK CARRIER

ANTONIOS DEMADES

MAIN PARTICULARS

	FT - INCHES	METRES
LENGTH OVERALL	588'-1 3/16"	181.48
LENGTH B.P.	584'-4 5/8"	179.48
BREADTH MOULDED	74'-9 3/16"	22.79
DEPTH MOULDED	46'-3 1/2"	14.10
DRAFT	35'-5 1/8"	10.84
DISPLACEMENT	58,128 LONG TONS	59,606 METRIC TONS
MAIN ENGINES	FIAT B.V.8.S.	11,200 BHP
RPM	135	
GROSS TONNAGE	15,977	
NET TONNAGE	10,439	



CONDITION II

HOLD NO 1 FLOODED 2291.4 MT
HOLD NO 2 FLOODING
DISPLACEMENT 41,254 M3

DRAFT FWD 19.23 M
DRAFT AFT 7.74 M
HOLD N° 2 100%
HOLD N° 2 4748 MT

GMT corr. 1.25 M

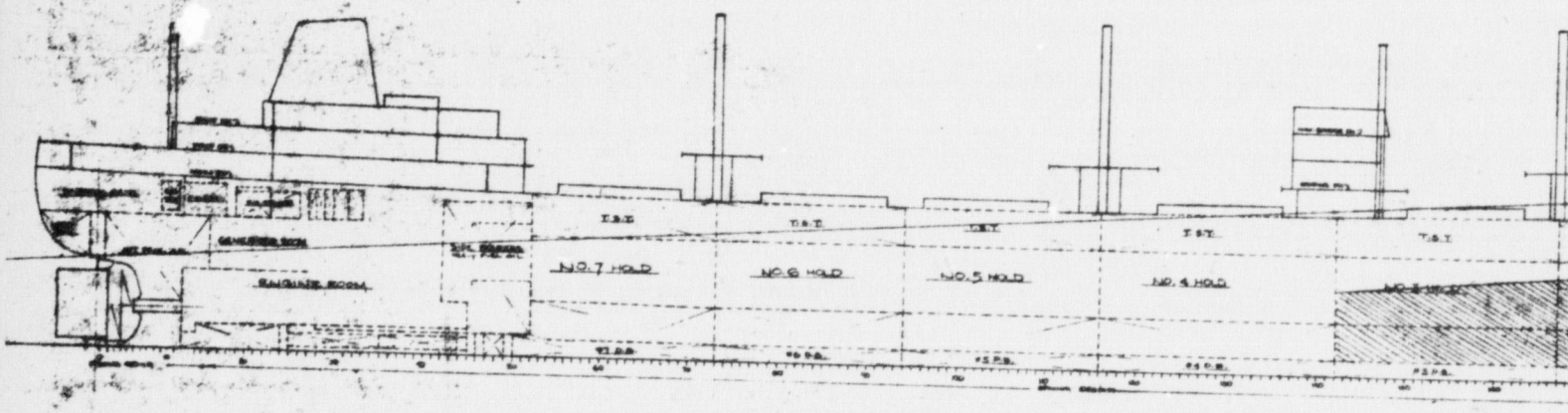
NO.	DESCRIPTION	DATE	APPD.

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
56 COMMERCIAL WHARF BOSTON, MASS. 02110

"ANTONIOS DEMADES"

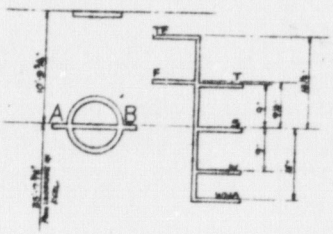
PROFILE

DRAWN BY [illegible] DATE 4/14/58
CHECKED BY [illegible] DATE 5/-/58
APPROVED BY DATE
SCALE
DWG. No. C186-2 ALT. O SH.



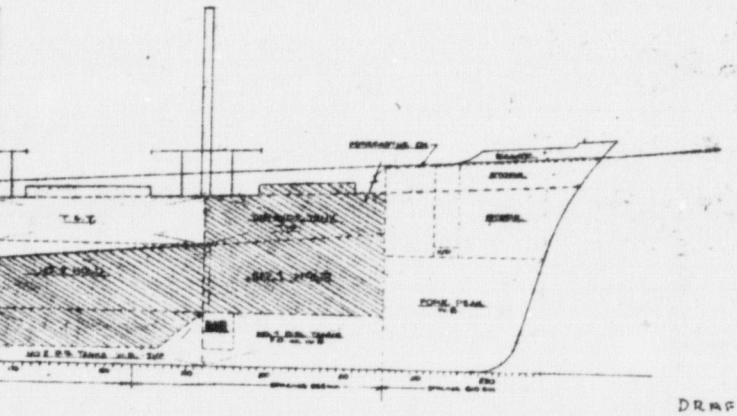
54-3

PLIMSOLL MARK
1" = 1'-0"



BULK CARRIER
ANTONIOS DEMADES
MAIN PARTICULARS

	FT - INCHES	METRES
LENGTH OVERALL	660'-1 3/16"	201.65
LENGTH B.P.	581'-6 1/2"	177.48
BREADTH MOULDED	74'-9 5/16"	22.79
DEPTH MOULDED	46'-3 3/4"	14.10
DRAFT	35'-5 5/8"	10.86
DISPLACEMENT	58,175 LONG TONS	59,134 METRIC TONS
MAIN ENGINE	FIAT B.V 8.8	11,600 BHP
RPM	126	
GROSS TONNAGE	15,977	
NET TONNAGE	10,439	



CONDITION III

HOLD NO 1 FLOODED 2291.4 MT
HOLD NO 2 FLOODING
HOLD NO 3 FLOODING
DISPLACEMENT 41,796 M³

DRAFT FWD 13.18 M
DRAFT AFT 10.02 M
HOLD 2 2557 MT ~50%
HOLD 3 2747 MT ~54%

GMT CORR .785 M

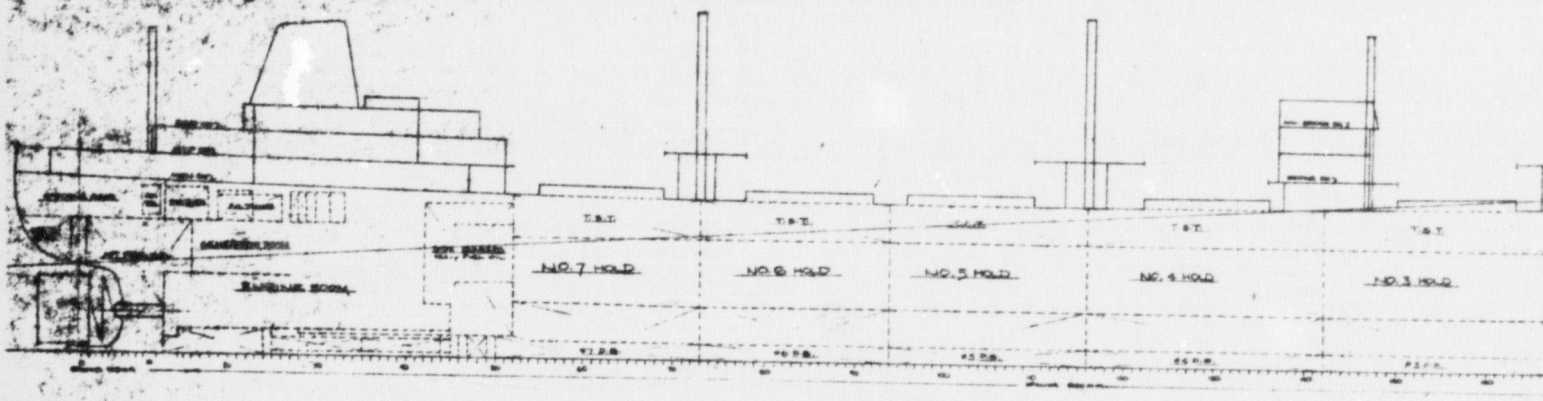
ALT	DESCRIPTION	DATE	CHKD

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
55 COMMERCIAL WHARF BOSTON, MASS. 02110

"ANTONIOS DEMADES"

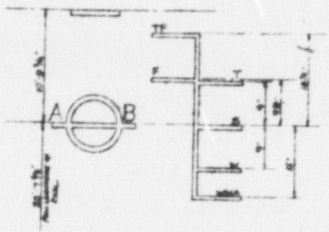
PROFILE

DRAWN BY [illegible] DATE 6/10/70
CHECKED BY [illegible] DATE 7/-/70
APPROVED BY DATE
SCALE
DWG. No. C186-2 ALT. 0 SH.


T.S.T.
T.S.T.
T.S.T.
T.S.T.
NO. 7 HOLD
NO. 6 HOLD
NO. 5 HOLD
NO. 4 HOLD
NO. 3 HOLD

PLIMSOLL MARK

1" = 1'-0"

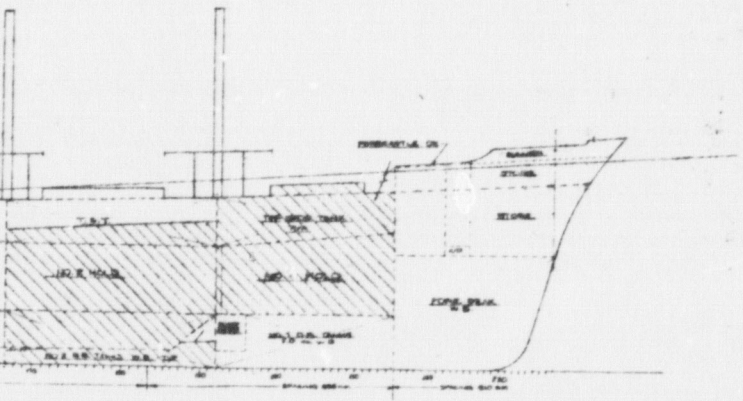


BULK CARRIER

ANTONIOS DEMADES

MAIN PARTICULARS

	FT. IN. & 32ND	METRES
LENGTH OVERALL	608' - 1 3/16"	185.48
LENGTH B.P.	584' - 0"	178.64
BREADTH MOULDED	76' - 0 3/16"	23.18
DEPTH MOULDED	46' - 9 15/16"	14.30
DRAFT	30' - 7/8"	10.86
DEADWEIGHT	28,125 LONG TONS	28,584 METRIC TONS
MAIN ENGINE	STAT B.T.D.E.	11,200 BHP
SPEED	15½	
GROSS TONNAGE	15,977	
NET TONNAGE	10,459	



CONDITION IV

HOLD NO 1	FLOODED	2291.4 MT
HOLD NO 2	FLOODING	
DBL. BOTTOM NO 2	FLOODING	
DISPLACEMENT	41,065 M³	

DRAFT FWD	18.53	
DRAFT AFT	8.00	
HOLD NO 2	4020 MT	~ 84%
DBL BOTTOM NO 2 P	269 MT	~ 80%
DBL BOTTOM NO 2 S	269 MT	~ 80%
GMT CORR.	1.293 M	

ALT	DESCRIPTION	DATE	WHO

JOHN W. GILBERT ASSOCIATES, INC.

NAVAL ARCHITECTS — MARINE ENGINEERS

50 COMMERCIAL WHARF — BOSTON, MASS. 02110

"ANTONIOS DEMADES"

PROFILE

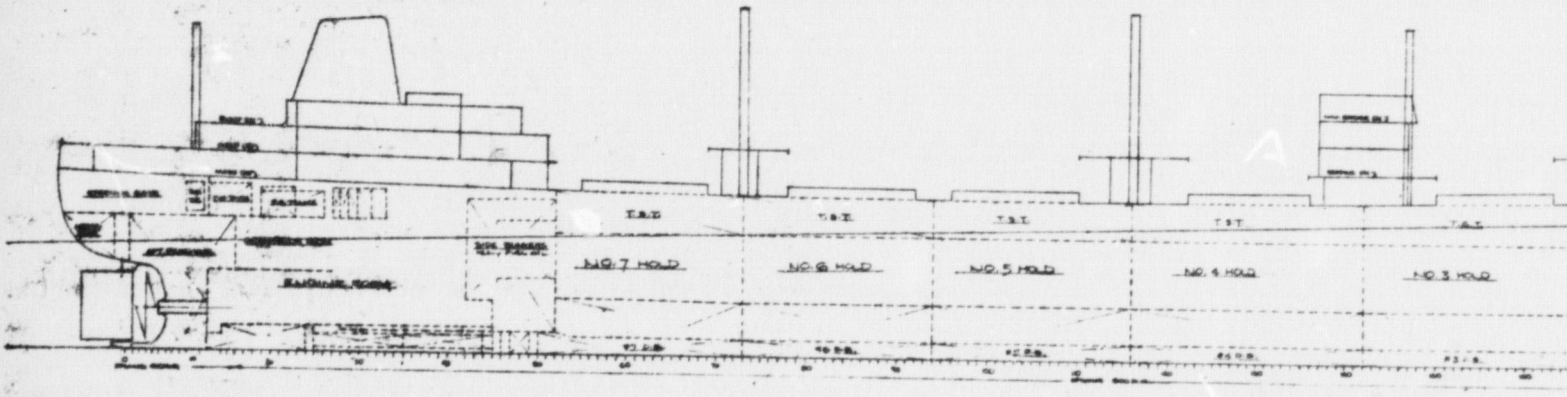
DRAWN BY — DATE 8/[illegible]

CHECKED BY — DATE 9/[illegible]

APPROVED BY — DATE

SCALE

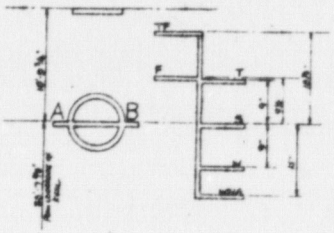
DWG. NO C186-2 ALT. 0 SH.



04-5

PLIMSOLL MARK

1" = 1'-0"

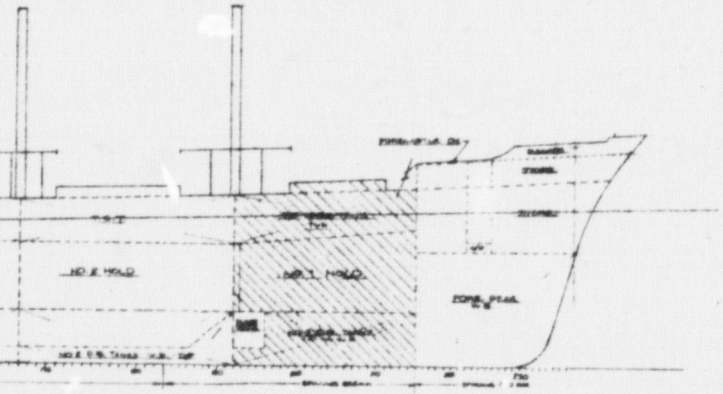


BULK CARRIER

ANTONIOS DEMADES

MAIN PARTICULARS

	FT - INCHES	METRIC
LENGTH OVERALL	585'-1 3/16"	178.46
LENGTH B.P.	564'-4½"	172.04
BREADTH MOULDED	76'-9 3/16"	23.39
DEPTH MOULDED	46'-8 5/8"	14.19
DRAFT	35'-5½"	10.80
DISPLACEMENT	58,135 LONG TONS	59,074 METRIC TONS
MAIN ENGINE	FIAT B.7.7 S.S	11,400 BHP
RPM	105	
GROSS TONNAGE	16,977	
NET TONNAGE	10,439	



CONDITION IA

HOLD Nº 1 FLOODED
DBL. BOTTOM Nº 1 FLOODED
DISPACEMENT 37,412 M.T.

DRAFT FWD	13.92 M ~ 45'-8"	
DRAFT AFT	9.65 M ~ 31'-8"	
HOLD Nº 1	2291.4 MT	100%
DBL BOTTOM Nº 1	790.5 MT	100%
GMT (CORR.	2.49 M ~ 8'-2"	
FREEBOARD MIN ~	1.90 M ~ 6'-2¾"	

NO.	DESCRIPTION	DATE	BY

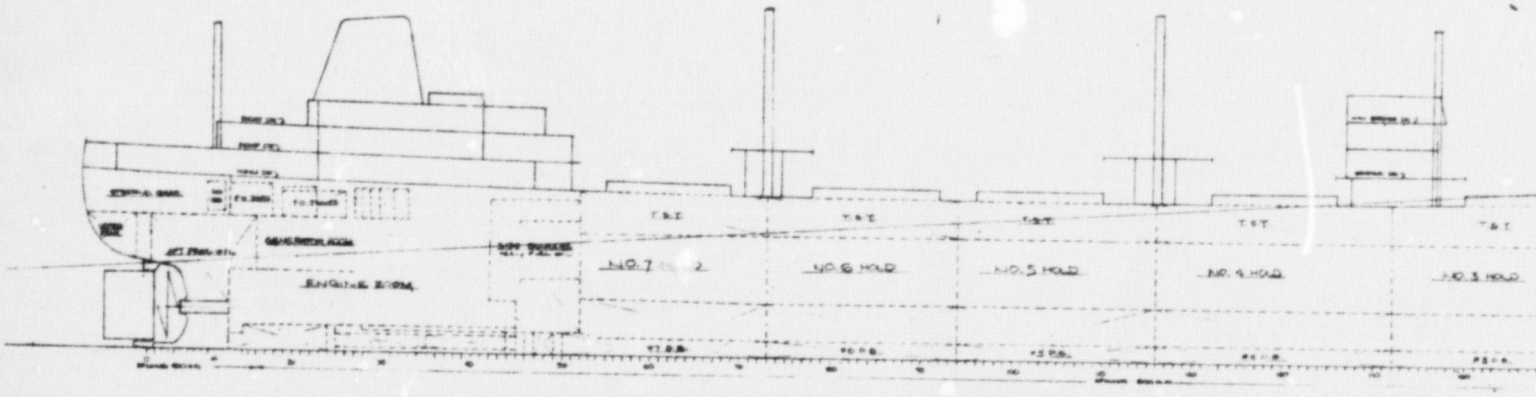
JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
58 COMMERCIAL WHARF BOSTON, MASS. 02110

"ANTONIOS DEMADES"

PROFILE

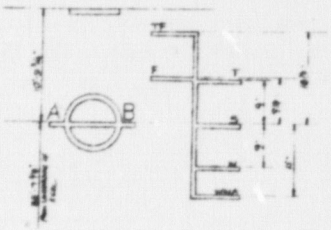
DRAWN BY [illegible] DATE 4/[illegible]
CHECKED BY [illegible] DATE 4/[illegible]
APPROVED BY DATE
SCALE

DWG. No. C186-2 ALI © SIN.


ENGINE ROOM
NO.7
NO.6 HOLD
NO.5 HOLD
NO.4 HOLD
NO.3 HOLD

PLIMSOLL MARK

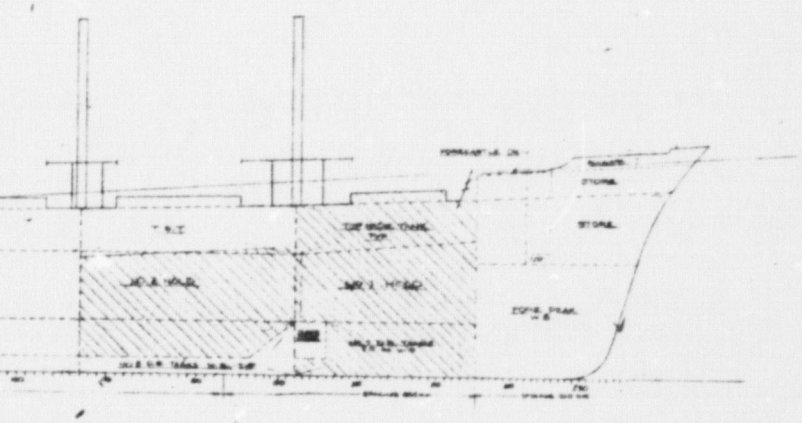
L. I. O.



BULK CARRIER
ANTONIOS DEMADES

MAIN PARTICULARS

	FT INCHES	METERS
LENGTH OVERALL	888 1 3/4"	271 46
LENGTH B.P.	861 4 1/2"	262 43
BREADTH MOULDED	74 9 3/4"	22 91
DEPTH MOULDED	42 2 3/4"	12 85
DRAFT	30 5 1/2"	9 24
DEADWEIGHT	29,150 LONG TONS	29,624 METRIC TONS
MAIN ENGINES	FIAT B.7 S 8	11,200 BHP
RPM	136	
GROSS TONNAGE	15,977	
NET TONNAGE	10,478	



CONDITION II A

HOLD Nº 1 FLOODED 2291.4 MT
DBL BOTTOM Nº 1 FLOODED 790.5 MT
HOLD Nº 2 FLOODING
DISPLACEMENT 41,081 M³

DRAFT FWD	19.26 M	
DRAFT AFT	7.44 M	
HOLD Nº 2	3762 MT	79.5%
GMT CORRECTED	1.22 M	

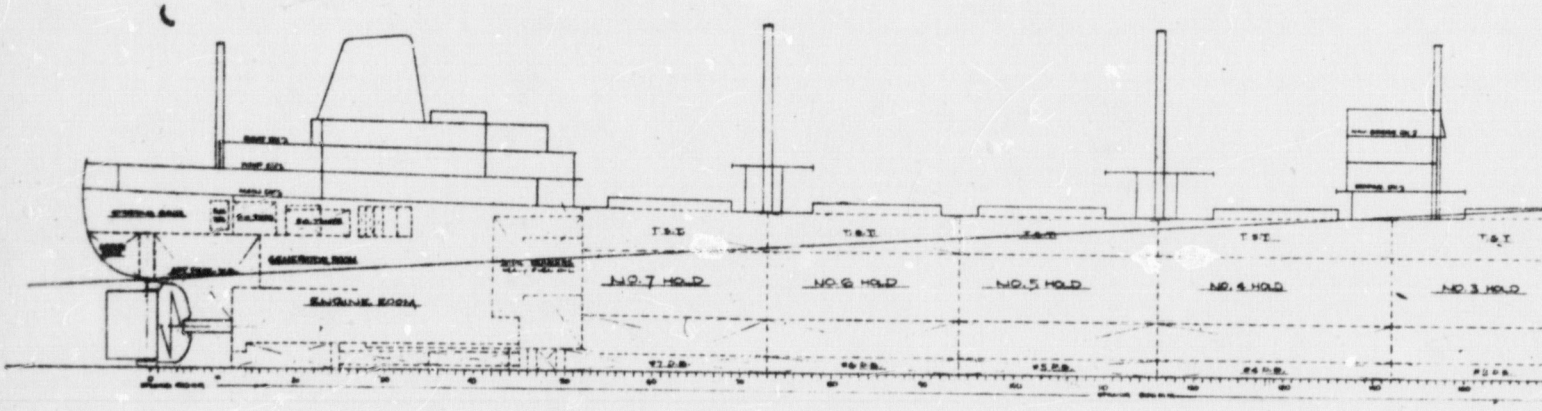
ALT	DESCRIPTION	DATE	MADE

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
50 COMMERCIAL WHARF BOSTON, MASS. 02110

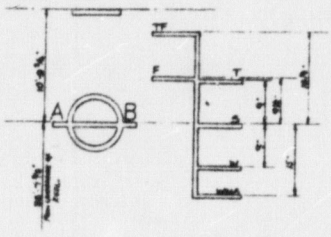
"ANTONIOS DEMADES"

PROFILE

DRAWN BY DATE
CHECKED BY DATE
APPROVED BY DATE
SCALE
DWG. No C1256-2 ALT. O SH.

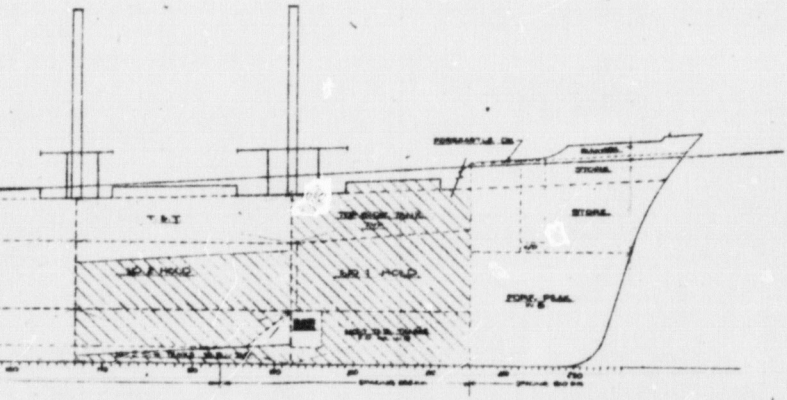

ENGINE ROOM
NO. 7 HOLD
NO. 6 HOLD
NO. 5 HOLD
NO. 4 HOLD
NO. 3 HOLD

PLIMSOLL MARK



BULK CARRIER
ANTONIOS DEMADES
MAIN PARTICULARS

	FT - INCHES	METRES
LENGTH OVERALL	668'-1 3/4"	191.46
LENGTH B.P.	589'-6 1/2"	179.68
BREADTH MOULDED	74'-9 3/4"	22.79
DEPTH MOULDED	46'-3 1/2"	14.10
DRAFT	35'-1 1/4"	10.56
DEADWEIGHT	39,150 LONG TONS	39,884 METRIC TONS
MAIN ENGINES	FIAT B.F.V. 8.8	11,600 BHP
R.P.M.	136	
GROSS TONNAGE	15,977	
NET TONNAGE	10,439	



CONDITION IV A

HOLD. NO 1	FLOODED	23,914 MT
DBL. BOTTOM No 1	FLOODED	990.5 MT
HOLD No 2	FLOODING	
DBL BOTTOM No 2	FLOODING	
DISPLACEMENT	40,925 M³	

DRAFT FWD	18.60 M	
DRAFT AFT	7.87 M	
HOLD No 2	3179 MT	~67 %
DBL BOTTOM No 2 P	212 MT	~63 %
DBL BOTTOM No 2 S	212 MT	~63 %
GMT CORR	1.253 M	

ALT	DESCRIPTION	DATE	MADE

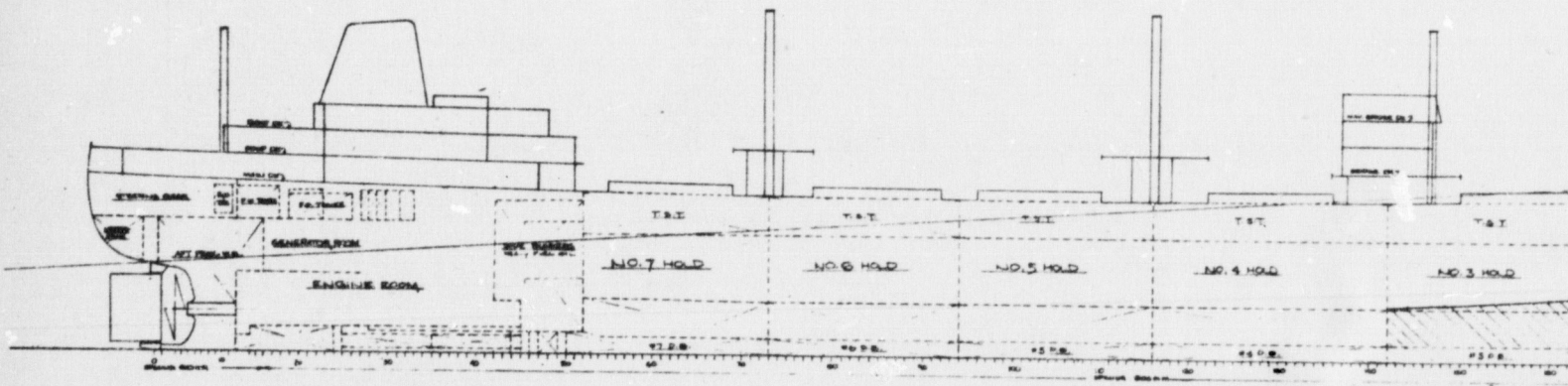
JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
98 COMMERCIAL WHARF BOSTON, MASS. 02109

"ANTONIOS DEMADES"

PROFILE

DRAWN BY [illegible] DATE 5/-/56
CHECKED BY [illegible] DATE 5/-/56
APPROVED BY DATE
SCALE

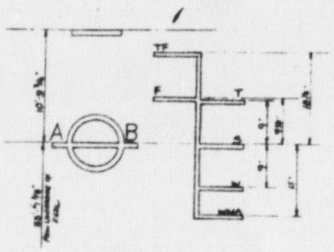
DWG. No. C186-2 ALT. 0 SH.


GENERATOR ROOM
ENGINE ROOM
NO. 7 HOLD
NO. 6 HOLD
NO. 5 HOLD
NO. 4 HOLD
NO. 3 HOLD

1-7

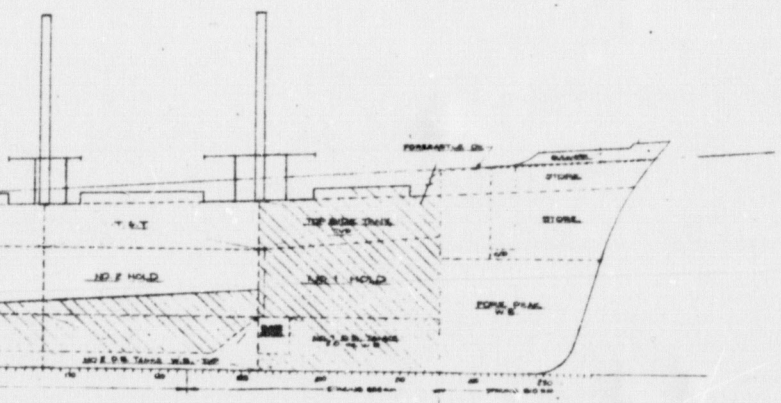
PLIMSOLL MARK

1'-1 0"



BULK CARRIER
ANTONIOS DEMADES
MAIN PARTICULARS

	FT. INCHES	METERS
LENGTH OVERALL	588'-1 7/8"	181.48
LENGTH B.P.	559'-4 1/2"	171.68
BREADTH MOULDED	74'-0 7/16"	22.59
DEPTH MOULDED	46'-3 3/8"	14.10
DRAFT	35'-7 1/8"	10.86
DEADWEIGHT	35,135 Long Tons	35,694 METRIC TONS
MAIN ENGINE	FIAT B.V.R.S	11,600 BHP
RPM	136	
GROSS TONNAGE	15,977	
NET TONNAGE	10,439	



CONDITION III A

HOLD No 1	FLOODED	2291.4 MT
DBL BOTTOM No 1	FLOODED	790.5 MT
HOLD No 2	FLOODING	
HOLD No 3	FLOODING	
DISPLACEMENT	41,445 M³	

DRAFT FWD	19.01 M	
DRAFT AFT	- 7.99 M	
HOLD No 2	1994 MT	42 %
HOLD No 3	2141 MT	42 %
GMT CORR	.867 M	

ALT	DESCRIPTION	DATE	BY/CK

JOHN W. GILBERT ASSOCIATES, INC.
NAVAL ARCHITECTS MARINE ENGINEERS
66 COMMERCIAL WHARF BOSTON, MASS. 02110

"ANTONIOS DEMADES"

PROFILE

DRAWN BY [illegible] DATE 4/-/73
CHECKED BY [illegible] DATE 4/-/73
APPROVED BY DATE
SCALE
DWG. No. C186-2 ALT. 0 SH.

Exhibit 57

(Agents Report of Panama)

[PHOTOSTATS]

(Opposite) ☛

CABLE ADDRESS
"FERNIE" CRISTOBAL

EUROPEAN AGENTS
SIMPSON SPENCE & YOUNG
20 ST. MARY AXE
LONDON E. C. 3

FERNIE BROS. & CO.

SHIPOWNERS AGENTS & BROKERS
CRISTOBAL & BALBOA
PANAMA CANAL

BOX 212, BALBOA

TELEPHONE NUMBERS
CRISTOBAL 1772
BALBOA 1657

TELEX - 30482020 FERNIE
PA211 FERNIE

Messrs. Maritime Brokers Inc.,
1 Whitehall St.,
New York, N. Y. 10004

RECEIVED
21 JAN 1970
Ans'd

S/S "ANTONIOS S. DEMADES" Voy:

Arrived: Cristobal, C. Z. / ~~Balboa, C. Z.~~ — 1.13.70 (Date) — 0425 (Time)

FROM: Boston TO: Japan (for orders)

VIA direct.

Bunkers arriving: 99 tons intermediate fuel oil and 25 tons diesel oil.

TRANSIT PARTICULARS:

Commmenced Transit:	1.14.70 (Date)	0515 (Time)
Completed Transit:	1.14.70 (Date)	1300 (Time)
SAILED ~~Cristobal, C. Z.~~ / Balboa, C. Z.	1.14.70 (Date)	1338 (Time)

BUNKERING PARTICULARS:

Docked/~~Anchored~~ ~~Cristobal~~	1.13.70 (Date)	1815 (Time)
Commenced Bunkering:	1.13.70 (Date)	1940 (Time)
Finished Bunkering	1.14.70 (Date)	0045 (Time)

07-2
add

Replenished

	Tons		Brls. Fuel Oil
907.50	Tons	6112.00	Brls. Intermediate F. O.
105.57	Tons	738.00	Brls. Diesel Oil

Bunkers Sailing:

	Tons	Brls. Fuel Oil
1006	Tons	Brls. Intermediate F. O.
124	Tons	Brls. Diesel Oil

Bunker Suppliers: Esso Standard Oil Co.

Undocked/~~Left Anchorage~~ Cristobal 1.14.70 Date 0240 Time

WATER, POTABLE

15	Tons on arrival
50	Tons replenished
65	Tons on Sailing

REMARKS, ETC.: The captioned vessel was subject to a delay prior to docking due to congestion at the berths.

Whilst the vessel was taking bunkers, the ship's Darat Certificate which had expired was renewed by the Panama Canal Authorities.

BJ:glt
cc. - Messrs. S. Livanos Shipbrokers Ltd., London
P.T.O.

C. FERNIE & CO., INC.

Cristobal, January 15th 70 196

R. W. OWEN, MANAGER

87-1

Shortly after undocking, the vessel commenced her transit and had an uneventful passage through the Canal.

We now confirm our cables, in the first instance, advising you of this vessel's arrival, docking, transit prospects, and delay, further, of hersailing together with bunkers taken. Your agents in Japan, Messrs. C. F. Sharp & Co., S, A., Yokohama, were also advised of the vessel's sailing and E.T.A. at theirs being on or about February 7th.

Exhibit 60

(Plan Showing Plates Renewed/Repaired)

[PHOTOSTAT]

(Opposite) ☛

OVERSIZE FOLDOUT(S) FOUND HERE IN THE PRINTED EDITION OF THIS VOLUME ARE FOUND FOLLOWING THE LAST PAGE OF TEXT IN THIS MICROFICHE EDITION

SEE FOLDOUT NO. S (J 487a)

Exhibit 61

(Plan Showing Internals Renewed/Repaired)

[PHOTOSTAT]

(Opposite) ☛

OVERSIZE FOLDOUT(S) FOUND HERE IN
THE PRINTED EDITION OF THIS VOLUME
ARE FOUND FOLLOWING THE LAST PAGE
OF TEXT IN THIS MICROFICHE EDITION

SEE FOLDOUT NO. 6 (J 489a)

"A"

J 490a

OMACHI Exhibit A

REPORT OF ANNUAL LOAD LINE INSPECTION

ISSUED UNDER THE AUTHORITY OF THE

REPUBLIC OF LIBERIA (Load Line Survey)

UNDER THE PROVISIONS OF ARTICLE 14 OF THE INTERNATIONAL LOAD LINE CONVENTION, 1930

AMERICAN BUREAU OF SHIPPING

REPORT NO.	NAME OF SHIP		DATE
KO3334	M.S. "ANTONIOS DEMADES"		January 29, 1969
GROSS TONNAGE	OFFICIAL NUMBER	PORT OF REGISTRY	PORT OF SURVEY
15977	1831	Monrovia, Liberia	Osaka, Japan

OWNERS

South East Atlantic Shipping, Ltd.

ITEM EXAMINED	CONDITION	RECOMMENDATIONS—REPAIRS EFFECTED
1. HATCHWAYS Coamings, Stiffeners, stays, beams, fore and afters, carriers, covers, tarpaulins, cleats battens, wedges and lashings	Satisfactory	(1) Indented areas of hatch covers were faired. (2) Hatch cover connecting chains were re-adjusted.
2. MACHINERY CASINGS Fidaley openings, casings, doors, sills, skylights	Satisfactory	
3. FLUSH BUNKER SCUTTLES Attachments	- - -	
4. COMPANIONWAYS Doors, sills, fastenings	Satisfactory	
5. VENTILATORS Coamings, supports, deck connections, closing arrangements	Satisfactory	
6. AIRPIPES Closing arrangements	Satisfactory	
7. GANGWAY, CARGO AND COALING PORTS In ship's sides and superstructures	- - -	
8. SCUPPERS AND SANITARY DISCHARGES Valves	Satisfactory	All opened, cleaned, examined and repaired as necessary.

A-1

J 491a

Exhibit A

ITEM EXAMINED	CONDITION	RECOMMENDATIONS — REPAIRS EFFECTS
9. AIRPORTS . Deadcovers	Satisfactory	
10. GUARD RAILS OR BULWARKS	Satisfactory	
11. FREEING PORTS Shutters, bars	Satisfactory	
12. PROTECTION AND ACCESS TO CREW'S QUARTERS Gangways	Satisfactory	
13. LIFE LINES	- - -	
14. END BULKHEADS OF SUPERSTRUCTURES Closing appliances and fastenings	Satisfactory	
15. TIMBER TANKER AND SPECIAL TYPE Supplementary fittings	- - -	
16. LOAD LINE MARKS	Satisfactory	Recoated and verified.

I have Surveyed the above mentioned ship and am satisfied:—

(i) that the fittings and appliances for the protection of openings, the guard rails, the freeing ports, and the means of access to the crew's quarters have been maintained in an effective condition, and

(ii) that no alterations have been made to the hull or superstructures which would affect the calculation determining the position of the load lines.

ANNUAL:—

I have endorsed the load line certificate number ..... as follows:-

..... Signature ..... Place ..... Date

RENEWAL:—

I have renewed the load line certificate number I-19,293 as follows:-

A. Umachi — Signature; Osaka, Japan — Place; January 29, 1969 — Date

Next SS due 6-71

O/C Renew to 30 June 1972 with full fee charge indicated

Renewed until July 20, 1970

A. Umachi

Surveyor, American Bureau of Shipping as Agent for the Republic of Liberia

A. Umachi

This Report is issued subject to the condition that it is understood and agreed that neither the Bureau nor any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by this Bureau or its Surveyors or in any entry in the Record or other publication of the Bureau or for any error of judgement, default or negligence of its Officers, Surveyors or Agents.

Fee
Expenses
Total A-2 fees

This vessel is classed ABS

Has this survey been carried out at the same time as a corresponding survey required for maintenance of class and for which a fee has been charged? Yes

If so, give report number K03333

This survey was requested by: S. Livanos Shipbrokers Representa
Osaka, Jap

Exhibit B (Excerpts)

(Deposition of Trevor Morris)

IT IS HEREBY STIPULATED AND AGREED, by and between parties hereto, through their respective counsel, that the signing and filing of the Deposition is waived and it is further stipulated that all objections are reserved for the trial except as to the form of the question.

TREVOR MORRIS, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. ALLEN:

Q What is your full name, please?

A Trevor Morris.

Q And your home address?

A 8174 Patterson Avenue, Burnaby, B. C.

Q What is your occupation, Mr. Morris?

A Marine surveyor.

Q How long have you been doing that?

A Ten years.

Q Have you any sea experience?

A Thirteen years at sea.

Q On or about September 9th, 1969, did you have occasion to survey the "Antonios Demades" at the Port of Vancouver?

A Yes, sir.

Q By whom were you retained?

A By the owner's agent, Empire Shipping Company.

Q What was the purpose of your survey?

B-1

Exhibit B

A It was to carry out an on hire survey prior to the ship loading any cargo for the purpose of finding any damages in the holds or on the deck and adjacent to the decks.

Q Was there anybody with you when you made this inspection?

A Yes, Mr. R. J. Allinson. He was acting for the charterers of the vessel.

Q And could we term this a joint survey?

A A joint survey, yes.

Q Tell me briefly just how you conducted it?

A We boarded the ship out at anchorage and Mr. Allinson and I went through the holds. I had a tape recorder with which I recorded damage which both I and Mr. Allinson noted and we finished the survey on the next day, I think it was.

Q Was your purpose to note and record every visible damage to the ship?

A Every visible damage, yes.

Q And in the course of your inspection did you thoroughly inspect the entire main deck area?

A Yes.

Q Did you also thoroughly inspect all the cargo holds and the bulkheads between them?

A Yes, all of them.

Q I show you this paper and ask you what that is?

A That is the copy of the report.

Q Does that contain your signature and Mr. Allinson's

B-2

Exhibit B

signature?

A Yes.

MR. ALLEN: That will be marked for Identification as the Defendant's Exhibit "H".

(DOCUMENT MARKED EXHIBIT "H" FOR IDENTIFICATION).

Q Were there any damages or defects which either one of you saw that are not contained in this report Exhibit "H"?

A No.

Q Did your inspection also include the hatches and the hatch covers?

A Yes.

Q Were these McGregor type hatch covers?

A Yes.

Q Now I want to ask you about Item 23 in your report. Can you tell me what that refers to?

A This is a manhole cover lid. This is a flat place just protecting the manhole cover itself.

Q In other words, it is not the manhole cover that you are referring to?

A No.

Q Was the manhole cover installed and in place?

A Yes.

MR. ALLEN: I have no further question.

CROSS-EXAMINATION BY MR. JACOBSEN:

Q Did you perform any water tests, hose tests, in connection

B-3

with your inspection?

A No.

Q Did you conduct any pressure tests?

A No.

Q Do you recall how many sections there were to the hatch cover on Number One?

A Not offhand.

Q Did you have any plans provided to you before your inspection for the inspection?

A No.

Q Your inspection was performed without any plans in hand?

A No.

Q You went in Number One hold?

A Yes, sir.

Q And Number Two hold?

A Yes, progressively through the holds.

Q Did you conduct your inspection with flashlight?

A No, we had the hatch lids open.

Q Hatch lids open?

A Yes.

Q How did you inspect the bulkheads?

A With a flashlight up and down the bulkheads.

Q You didn't use a ladder?

A No.

Q Did you operate the hatch covers at Number One?

ALLWEST REPORTING LTD.
4299 CANADA WAY
BURNABY 2, B.C.

Exhibit B

A No. The ship was cleaning at the time. There was still some cleaning to be done, so the hatches had been left open for the crew to clean also.

Q Did you inspect the drainage system at all, the bilge system?

A No.

MR. JACOBSEN: I have no further questions.

MR. ALLEN: Thank you.

---oooOOOooo---

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Exhibit D (Excerpts)

(Deposition of Reginald James Allison)

IT IS HEREBY STIPULATED AND AGREED, by and between parties hereto, through their respective counsel, that the signing and filing of the Deposition is waived and it is further stipulated that all objections are reserved for the trial except as to the form of the question.

REGINALD JAMES ALLINSON, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. ALLEN:

Q Mr. Allinson, will you please state your full name?

A Reginald James Allinson.

Q And your home address?

A 3258 West 35th Avenue, Vancouver, B. C.

Q What is your occupation, sir?

A Marine surveyor.

Q For how long have you been doing that work?

A About 35 years.

Q All in the Port of Vancouver?

A Mostly, yes.

Q Are you appointed as a surveyor to any particular classification society?

A Yes, sir, I represent three classification societies.

Q Which are?

A Germanischer Lloyd, Hamburg; China Corporation Register of Shipping, Taiwan and the Hellenic Register of

D-1

Exhibit D

Shipping in Greece.

Q Did you have occasion to survey the "Antonios Demades" at Vancouver on or about September 9th, 1969?

A I did.

Q What was the purpose of your inspection?

A To conduct a joint survey. I was acting for charterers. To conduct a joint survey with Mr. Morris, who I believe was acting for the owners of the vessel, relative to the general condition of the holds, all hold spaces and the deck, so far as possible, prior to the vessel going out.

Q Can you tell us briefly just how you and Mr. Morris conducted that examination?

A Yes, sir, we both attended on board the vessel and made ourselves known to the Master and the Officers and proceeded down the holds together. Mr. Morris had a portable recording apparatus and we agreed that we would find out the damage we noted to each other and agreed upon it and it was recorded on this particular tape recorder.

Q And in the course of your inspection did you say you went into the cargo hold?

A We did, sir.

Q And did you inspect the bulkheads between the holds?

A We did.

Q Did you inspect the hatch openings and hatch covers?

D-2

Exhibit D

A We did.
Q And the main deck area?
A Yes, sir.
Q Did you record in this report which has been marked Exhibit "A", all the damages which either or both of you found at that inspection?
A We did.
Q Did you sign that report at the end?
A I did.
Q After checking it over?
A Yes, sir.
Q And is it correct to say that there were no damages or defects or deterioration which you saw which are not listed in that report?
A I would say that is correct, yes.
Q And was it to the interest of your employer on this particular survey to record as much damage as possible?
A I would say so, yes.
Q Being the charterer of the ship?
A Yes.
Q Will you look at Item 23 and tell me what that refers to?
A 23 did you say?
Q Yes?
A That is just a light metal covering that normally lays over the top of the manhole cover itself.
Q When you inspected that area, was there a manhole cover

D-3

Exhibit D

installed and in place?

A I would say yes, otherwise we would have noted the fact it was missing.

Q And Item 23 refers just to a protective cover that goes over the manhole lid?

A That is correct.

MR. ALLEN: I have no further questions.

CROSS-EXAMINATION BY MR. JACOBSEN:

Q Mr. Allinson, you did the same things as Mr. Morris did. You were together all the time?

A Yes, sir.

Q And you didn't operate Number One hatch cover during the course of your inspection did you?

A I am afraid I have to say no to that. I think it was closed, as a matter of fact, or only partly open. It might have been open. I wouldn't say definitely yes or no. Chances are they would be open to give us light into the hold spaces.

Q And the inspection that is referred to in this report, Exhibit "H", says that it is for the purpose of ascertaining and reporting upon the condition of the vessel's cargo holds and decks and that is what you inspected?

A That is right, sir.

Q It also refers to the fact that you were going to determine and report upon the quantity of fuel oil on

D-4

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Exhibit E (Excerpts)

(Deposition of National Cargo Bureau by Captain S. Fraser Sammis)

CAPTAIN S. FRASER SAMMIS, being first duly sworn by the Notary Public, testified as follows:

EXAMINATION BY

MR. CHANDLER:

Q Captain, what is your name?

A My name is S. Fraser Sammis.

Q What is your residence?

A 11 Hawthorne Court, Centerport, New York.

Q Who is your employer?

A National Cargo Bureau, Incorporated.

Q How long have you been employed by National Cargo Bureau?

A In New York since 1959.

Q In what capacity are you presently employed?

A I am vice-president and chief surveyor.

Q How long have you been in that capacity?

A I have been chief surveyor since 1969, and vice-president for about two years.

Q In this capacity are you the custodian of the records for the National Cargo Bureau?

A No.

Q Are you a custodian?

A Yes, as a company officer.

A-1

Q You would be in a position to supervise the custody of these records?

A Yes.

Q What is the function of the National Cargo Bureau in relation to surveying ships and their cargo?

A Generally to promote safety of life at sea by certifying that cargo is properly stowed within the regulations and structure of the Coast Guard, and the general good practice of seamen.

Q Do you survey or witness the loading of cargo on bulk ships, and then certify those to the proper loading and so forth?

A Except in the case of grain the service is not mandatory, but of course we do.

Q In this capacity did National Cargo Bureau Inc. perform any other surveys on the Antonios Demades?

A Yes, National Cargo Bureau issued a certificate of loading dated January 6, 1970, file number All 456.

Q May I see that please?

A Yes you may.

(Captain Sammis is handing the requested material to Mr. Chandler at this time.)

Q Looking through these documents Captain Sammis,

E-2

Total A-2 Xcpy
If so, give report number KO3333
This survey was requested by: S. Livanos Shipbrokers Representa
Osaka, Ja

R. E. Johnson in Boston to myself concerning his activity on this vessel. The second document would be the smaller certificate.

Q Could you identify that Captain?

A That is the certificate authorization sheet indicating that the Antonios Demades, when inspected on December 29, 1969 was in fact ready to receive her cargo.

MR. CHANDLER: The next is the larger certificate. Could you identify that?

A This is the certificate of loading, number A11456, issued January 6, 1970 indicating that the cargo was loaded in accordance with the National Cargo Bureau recommendations, and those of the Coast Guard.

MR. CHANDLER: Would you identify Plaintiff's Exhibit 4?

A That is the National Cargo Bureau certificate authorization sheet which constitutes the rough notes of the attending surveyor.

(All of the documents previously mentioned, starting from the inter-office memorandum dated February 19, 1970 from Captain R. E. Johnson to Captain Sammis, up to the certificate of authorization sheet constituting the rough notes of the attending surveyor have been marked Plaintiff's Exhibit 1,

authorization sheet, am I correct?

A That is correct.

Q An authorization of what?

A It authorizes the time issuance of the certificate.

Q Captain Thompson issued that Exhibit 2?

A That is not the certificate authorization sheet. This is the certificate of readiness to load.

Q Exhibit 2 is a certificate of readiness to load?

A Yes.

Q That certificate is signed by Captain Thompson?

A He signed the certificate. Captain Koady attended the vessel.

Q Does that indicate, as far as to be determined from his inspection, that the vessel was in all respects ready to load that cargo for the intended voyage?

A That is right.

Q What is Exhibit 3?

A Exhibit 3 is the final certificate of loading issued after the vessel completed loading.

Q Would that certificate have been issued if your organization had known of any unseaworthiness of the vessel which would make her unfit to make the intend-

ed voyage?

A No, it would not.

Q Is there a certificate authorization sheet in this group of exhibits which we have marked?

A Yes, this one.

(The witness is indicating)

Q That is Exhibit 4. I thought that was the rough notes of the surveyor.

A It is.

Q It is both?

A Both.

Q What is the purpose of a certificate authorization sheet?

A This provides the background history indicating that the vessel is in all respects loaded in accordance with the requirements of our certificate.

Q Will you just tell us what these notations mean on the second sheet of Exhibit 4?

A I will read from the top.

(The witness is reading from the sheet referred to.)

S. D. 3507 and five eights as I read it here is a summer draft.

S. F. ten feet 09 and three quarters is a

E-5

summer free board.

S. D. /W26135 is a summer dead weight.

W. D 3510 and five eighths I take it to be the winter dra[illegible].

W. F. 1106 and three quarters would be the winter free board.

W. D. W. 25322 would be winter dead weight.

The next notation is loaded part cargo in New York in numbers 2, 4, and 6, 4844L/ the long tons. Loaded Boston number one steel 9182.4. I believe the next word is proler -- proler 10961.1, the sum of the two is 20143.5 long tons.

The last notation I had to decipher. That is to proceed via cost wide corridor summer marks - to Japan.

MR. ALLEN: I have no further questions.

RE-EXAMINATION BY

MR. CHANDLER:

Q Captain, it is mentioned the surveyor in Boston is not an employee of National Cargo Bureau Inc., but was appointed. Could you explain what a National Cargo Bureau appointment entails?

A That means that he is appointed on a free basis as the Bureau's representative to carry out the

Bureau's functions in that port after his qualifications have satisfied us.

Q Would correspondence received from him be part of the documents kept in the normal course of business?

A Yes.

Q In the inspection that you issued, the survey that was done, would a survey be done to inspect the hull, or the machinery, or the equipment of the vessel?

A No. The hull insofar as the cargo compartments and their boundaries are concerned.

Q Is there a survey done beyond that?

A No.

Q So the attending surveyor in Boston, would he be competent to comment on the seaworthiness of the vessel as far as it's hull, or equipment, or machinery?

A No.

MR. ALLEN: He asked you if he was competent.

MR. CHANDLER: I will re-phrase the question. Would it be part of his job to inspect the hull, equipment, or machinery?

A That is the way I answered. The answer is no.

MR. ALLEN: You do regard your Boston appoint-

E-7
xxx

J 510a

Exhibit F

(NCB Loading Certificate)

NATIONAL CARGO BUREAU, INC.

This is to Certify, that the MV ANTONIOS DEMADES of 10479.0 tons register, built at Yugoslavia 1963 whereof M. Sarris is Master and now lying at Pro'er, Everett, Mass. is passed to load as follows:

GENERAL CARGO-Holds Nos. _____

BULK GRAIN (Full Holds) Nos. _____

(Part Holds) Nos. _____ Bins Nos. _____

Other BULK CARGOES Nos. 1-2-3-4-5-6-7
(Coal, Sulphur, Phosphates, etc.) SCRAP IRON IN BULK

said holds having been prepared in accordance with the regulations of the Commandant of the United States Coast Guard so far as applicable, and in accordance with the recommendations of National Cargo Bureau, Inc.

DATED at Boston, Mass. Dec. 29, 19 69 Time passed 1000 hrs.

THIS IS NOT A CERTIFICATE OF SEAWORTHINESS

THE FOREGOING INSPECTION WAS UNDERTAKEN AND THIS CERTIFICATE OF READINESS IS ISSUED ON THE FOLLOWING TERMS AND CONDITIONS: While the Officers and Committees of National Cargo Bureau, Inc. use their best endeavors to insure that the functions of the Bureau are properly executed, neither such Officers nor such Committees, nor the Bureau nor its surveyors, employees, representatives or agents, are under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by the Bureau or its surveyors, or for any error of judgment, default, or negligence of the surveyors or other employees, representatives or agents of the Bureau.

Directors

Original Signed By
R. E. THOMPSON
R.E. Thompson

No. _____ Surveyor

F

J 511a

Exhibit G

(NCB Loading Certificate)

No. A-

A-11456

CERTIFICATE OF LOADING

— OF —

NATIONAL CARGO BUREAU, INC.

Issued, as to dangerous cargo and grain in bulk, under authority of the United States of America, Commandant, United States Coast Guard, pursuant to the provisions of the International Convention for the Safety of Life at Sea, 1960; (2) the provisions of section 4472, Revised Statutes, as amended (46 U. S. C. 391 (7) (a)); (3) the provisions of section 4417, Revised Statutes, as amended (46 U. S. C. 391); (4) the Magnuson Act of August 9, 1950, amending the Espionage Act (50 U. S. C. 191a); and (5) the provisions of the Act of July 5, 1884, as amended (46 U. S. C. 2) and of section 4 Revised Statutes, as amended (46 U. S. C. 372).

BOSTON, MASS., July 6, 19--

This is to Certify, That the Liberian (flag) MV ANTONIOS PENADES (Name of Vessel)

whereof A. Sarris is Master, of 10479.0 Net Tons, built at Yugoslavia

in 1963 bound for Japan

has been under the inspection of a surveyor or surveyors of NATIONAL CARGO BUREAU, INC., at this port fr time to time during the course and in respect of the loading of cargo hereinbelow specified; that so far as it came un the observation of such surveyor or surveyors, the stowage of dangerous cargo and of grain in bulk was in accordance w the regulations of the Commandant, United States Coast Guard, and the stowage of other cargo not subject to Co Guard Regulations was in accordance with the recommendations of National Cargo Bureau, Inc.

THIS CERTIFICATE IS NOT A CERTIFICATE OF SEAWORTHINESS AND RELATES ONLY TO THE FOLLOWING CARGO.

Scrap Iron in bulk stowed underdeck in #1, #2, #3, #4, #5, #6 and #7 hatches and said to be 20143.5 W/Tons.

Scrap iron cargo loaded in holds #2, #4, #6 topped-off previously loaded scrap iron cargo.

DUPLICATE

Draft of water loaded, Forward 34 ft. 07 in. Aft 35 ft. 08.5 in. Mean 35 ft. 01.7

Freeboard 11 ft. 03.7

THE FOREGOING INSPECTION WAS UNDERTAKEN AND THIS CERTIFICATE IS ISSUED ON THE FOLLOWING TERMS AND CONDITIC

While the Officers, Directors, and Committees of National Cargo Bureau, Inc. use their best endeavors to insure that the functions of the Bureau are pro executed, neither such Officers, nor such Directors, nor such Committees, nor the Bureau, nor its surveyors, employees, representatives or agents, are under circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by the Bureau or its surveyors, or for any error of judgr default or negligence of the surveyors or other employees, representatives or agents of the Bureau. This certificate covers only the cargo herein described as ha been loaded at place of issuance of this certificate, and under no conditions is it to be deemed to cover any other cargo whether loaded at place of issuance of certificate, or any other port. This certificate shall not be valid if upon sailing from any loading port and/or any fueling port and/or during any part of the vo the vessel's draft shall exceed that permitted by the law of her flag and/or the draft designated for the vessel in the Classification Society in which she may be cla

VESSEL AGENT — Moran Shipping Agencies Inc./Anthony Shipping Co.

FEE

ADD'L CHGS (if any) 90.20

EXPENSES

TOTAL $ 90.20

Original Signed By
R. E. THOMPSON

Survey

R.E.Thompson

G

J 512a

Exhibit K

(On Hire Survey at New York)

MARINE CLAIM SERVICES, INC.

SURVEYING ONE ELEVEN JOHN STREET CONSULTING

NEW YORK, N. Y. 10038

TELEPHONE 962-3310 AREA CODE 212

CABLEGRAMS CLAIMSERVE - NEW YORK

REPORT OF SURVEY

FILE NO. C9MWX-280 N DATE December 26, 1969

M.S. "ANTONIOS DEMADES"
INSPECTION PRIOR TO LOADING
OF SCRAP STEEL December 22, 1969

Report of On Hire Inspection Survey made by the undersigned surveyor on December 22, 1969 at the request of Hugo Neu Corp., 45 Nassau Street, New York, New York 10005 on the M.S. "ANTONIOS DEMADES" while the vessel was lying afloat alongside North Wet Basin, Port Kearny, New Jersey, in order to ascertain the condition of cargo carrying enclosures, prior to loading of scrap steel.

ATTENDING: Chief Officer

GENERAL PARTICULARS OF THIS VESSEL:

M.S. "ANTONIOS DEMADES"	
Type Vessel	7 Hatch Bulk Carrier
Home Port	Monrovia, Liberia
Where Built	1963 Yugoslavia
Owners	Anthony Shipping Company
Gross Tonnage	15,977
Net Tonnage	10,479
Classed By	A.B.S.
Last Drydocked	January 1969, Japan
Captain in Charge	M. Sarris
Chief Officer	C. Veachos
Chief Engineer	N. Parabalos

The M.S. "ANTONIOS DEMADES" docked alongside her present berth at about 0635 hours on December 22, 1969.

PARTICULAR FINDINGS:

NOTE: Only a damage condition, as found during the inspection, is herewith recorded. All frames counted from forward in each compartment, transverse bulkhead stiffeners counted from side to centerline, unless otherwise noted.

----------oOo----------

K-1

Exhibit K

#1 HOLD
STARBOARD SIDE: #1 STBD.

Forward transverse bulkhead with scattered light to moderate indents.
Pipeline at shell forward protected full length by solid metal guards, guards with scattered light to moderate indents.
Shell frames damaged are as follows: #2 two light and two moderate indents at lower section, #4 two light indents at upper, mid section and one moderate indent at lower section, #6 one moderate indent mid section and two moderate indents lower section, #8 one light indent lower section, #9 moderately indented at about mid section and one heavy indent at lower section and one moderate indent at lower bracket flange, #11 two light indents mid and lower section, #13 one heavy indent at about mid section, #17 lightly indented lower bracket flange.
Pipeline at shell aft protected full length by solid metal guards, guards with scattered light indents.
After transverse bulkhead with scattered light indents particularly at lower sections.
Vertical fluted sections #3, #4, #5 at after transverse bulkhead with scattered light to moderate indents.
Two pipelines at after transverse bulkhead protected full length by solid metal guards, one of the pipelines with the third section counted from the bottom missing.

PORT SIDE:

After transverse bulkhead with some light indents.
Vertical fluted sections #1, #2, #3 at after transverse bulkhead with scattered light and some moderate indents.
Two pipelines at after transverse bulkhead protected full length by solid metal guards.
Access ladder at after transverse bulkhead with stringers heavily indented at about 8' up from the bottom, waved 7 rungs bent.
Forward transverse bulkhead scattered light to moderateindents.
Pipeline at shell forward protected full length by solid metal guards, guards with scattered light to moderate indents.
Shell frames damaged are as follows: #2 two moderateindents at mid section and one light indent lower section, #4 moderately indented at lower section, #6 one heavy indent upper section one moderate indent mid section and one heavy indent at lower section, #8 light indented lower bracket flange, #10 one heavy indent at mid section and moderately indented lower bracket flange, #12 moderately indented at mid section and lower section, #14 moderately indented lower bracket flange, #16 moderately indented lower bracket flange, #18 one heavy indent upper section.
Pipeline at shell aft protected full length by solid metal guards.
Tank top plating exposed and unprotected with scattered moderate and some heavy indents.

DB 5 UNDER 807444

#2 HOLD
STARBOARD SIDE:

Forward transverse bulkhead and vertical fluted sections-one sharp indent in fourth section approximately 2' above slope tank plating.
Slope tank plating exposed and unprotected.
Pipeline at shell protected by iron guard.
Shell frames damaged are as follows: #1 one indent, #3 one indent, #5 four inden #7 two indents, #11 one indent, #13 one indent, #17 one indent, #19 one indent, #23 two indents.
Pipeline at shell aft protected by iron guards.
Side tank plating exposed and unprotected.
After transverse bulkhead and vertical fluted sections-#1 one sharp indent, #2 five sharp indents and set in lower section, #3 three sharp indents upper section, #4 two sharp indents lower section one heavy indent upper section.
Horizontal stiffening brackets between vertical fluted sections indented on edge
Two pipelines at shell protected by iron guards.

Exhibit K

PORT SIDE: #3

After transverse bulkhead and vertical fluted sections-#1 one indent, #2 nine indents, #3 five indents, #4 three indents, #5 two sharp indents, bulkhead between #3 and #4 and #5 with three heavy indents.

Two pipelines at bulkhead protected by iron guards.

Forward transverse bulkhead and vertical fluted sections-#2 one indent.

Access ladder at bulkhead with stringers set to port mid section and 4 rungs be

Slope tank plating exposed and unprotected.

Pipeline at shell protected by iron guards.

Shell frames damaged are as follows: #3 three indents, #7 two heavy indents, #9 one heavy indent and one indent, #17 two indents,

Pipeline at shell aft protected by iron guards.

Slope tank plating with slight scattered indents-exposed and unprotected.

→Tank top plating with scattered indents.

Wiri[illegible] CO2 piping running fore and aft alongside side wing tank plating exposed and unprotected.

#3 HOLD
STARBOARD SIDE:

Forward transverse bulkhead with six moderate indents and two light indents.

Vertical fluted sections #2, #3, #4, #5 and centerline at forward transverse bulkhead with scattered light and some moderate indents.

Pipeline at shell forward protected full length by solid metal guards.

Shell frames damaged are as follows: #2 two moderate indents lower bracket flang #4 two moderate indents upper section, #6 one moderate and one heavy indent upper section, #9 moderately indented upper section, #12 two moderate indents upper section and two moderate indents lower section, #15 moderately indented mid sectior #18 moderately indented lower bracket flange, #20 one moderate indent mid section #22 moderately indented at mid section and upper section.

Pipeline at shell aft protected full length by solid metal guards, guards with two moderate indents lower section.

→Side tank plating exposed and unprotected with scattered light to moderate inde

After transverse bulkhead with some lightindents.

Pipeline at after transverse bulkhead protected full length by solid metal guarc upper sectionsof guards moderately indented.

Vertical fluted sections #1, #2, #4, #5 at after transverse bulkhead with scattered light to moderate indents.

Access ladder at after transverse bulkhead with one rung broken 14 rungs bent, and stringers moderately indented at lower and upper sections and mid section and waved.

PORT SIDE:

After transverse bulkhead with some light indents.

Pipeline at after transverse bulkhead protected full length by solid metal guarc

Vertical fluted sections #2, #4, #5 at after transverse bulkhead with light indents.

Forward transverse bulkhead with five moderate indents.

Vertical fluted sections #2,#3, #4, #5 at forward transverse bulkhead with scattered light to moderate indents.

Horizontal brackets between vertical fluted sections #1 and #2, #2 and #3, #4 and #5 at forward transverse bulkhead with moderate indents.

Pipeline at shell forward protected full length by solid metal guards.

Shell frames damaged are as follows: #4 moderately indented at mid section, #6 one moderate indent lower bracket flange, #9 lightly indented mid section, #12 two moderate indents upper section, #20 moderately indented upper section and lower bracket flange, #22 two moderate indents upper section and light indents lower bracket flange.

Pipeline at shell aft protected full length by solid metal guards.

→Side tank plating exposed and unprotected with scattered light to moderate inden

→Tank top plating exposed and unprotected with scattered moderate to heavy indents.

DB

Exhibit K

#4 HOLD
STARBOARD SIDE: #4

Forward transverse bulkhead and vertical fluted sections-#4 one heavy indent.
Pipeline at bulkhead protected by iron guards.
Pipeline at shell forward protected by iron guards.
Shell frames damaged are as follows: #11 one indent, #14 three heavy indents, #20 two heavy indents, #23 two indents.
Pipeline at shell aft protected by iron guards.
→ Side tank plating two sharp indents at forward end-exposed and unprotected.
After transverse bulkhead and vertical fluted sections-#1 four sharp indents, #2 heavily indented mid section, #3 two sharp indents, #4 three heavy indents, #5 three sharp indent
Two pipelines at bulkhead protected by iron guards.

PORT SIDE:

After transverse bulkheadand vertical fluted sections-#1 three sharp indents, #2 four sharp indents, #3 two sharp indents, #5 heavily set in one area.
Access ladder at bulkhead with stringers waved and with 24 rungs bent and 1 missing.
Two horizontal stiffening brackets set down on edge.
Forward transverse bulkhead and vertical fluted sections-#2 one sharp indent, #3 two sharp indents and one heavy indent, #6 two heavy indents.
Pipeline at bulkhead protected by iron guards-lower guards set to port.
Pipeline at shell forward protected by iron guards.
Two pipelines and valves between frames #3 and #4, #4 and #5 exposed and unprotected.
Shell frames damaged are as follows: #3 four heavy indents, #6 one indent, #8 three indent, #11 heavily indented upper section, #17 three heavy indents, #20 two heavy indents, #23 one indent.
Pipeline at shell aft protected by iron guards.
Side tank plating with light indents mid section-exposed and unprotected.
Tank top with sharp scattered indents in particular in way of square.
Electrical wiring and pipelines running fore and aft under wing tank plating exposed and unprotected.

#5 HOLD
STARBOARD SIDE:

Forward transverse bulkhead with some light indents.
Vertical fluted sections #3, #4, and centerline at forward transverse bulkhead with light indents.
Pipeline at forward transverse bulkhead protected full length by solid metal guards.
Shell frames damaged are as follows: #2 moderately indented at lower section, #6 one moderate indent lower section and light indents lower bracket flange, #17 one moderate indent lower section.
Pipeline at shell aft protected full length by solid metal guards.
Side tank plating exposed and unprotected with scattered light to moderate indents.
After transverse bulkhead with light to moderate indents.
Two pipelines at after transverse bulkhead protected full length by solid metal guards, one of the pipelines with guards scattered light to moderate indents.
Vertical fluted sections #1, #2, #3, #4 at after transverse bulkhead with scattered light indents.

K-4

Exhibit K

PORT SIDE:

After transverse bulkhead with light indents.
Vertical fluted sections #2, #3, #4, #5 at after transverse bulkhead scattered light and some moderate indents.
Two pipelines at after transverse bulkhead protected full length by solid metal guards.
Forward transverse bulkhead with two light and one moderate indent.
Vertical fluted sections #3 and #4 at forward transverse bulkhead with some light to moderate indents.
Access ladder at forward transverse bulkhead with stringers moderate indented at bottom section, 6 rungs bent platform at upper section of ladderwith two pipe-railings broken and heavily bent.
Pipeline at shell forward protected full length by solid metal guards.
Shell frames damaged are as follows: #6 moderately indented upper section, #8 one moderateindent lower bracket flange #11 heavily indented at its mid section one moderateindent upper section, #14 moderately indented lower bracket flange and upper section, #17 one moderate indent lower bracket flange.
Pipeline at shell aft protected full length by solid metal guards.
Side tank plating exposed and unprotected with scattered light and moderate indents and two heavy indents.
Tank top plating exposed and unprotected with scattered moderate and heavy indents.

#6 HOLD
STARBOARD SIDE:

Forward transverse bulkhead and vertical fluted sections-#1 three sharp indents #2 five sharp indents, #4 two sharp indents, #5 one sharp indent and two indents lower section.
Four horizontal stiffening brackets indented on edge.
Pipeline at shell protected by iron guards.
Shell frames damaged are as follows: #2 two indents, #5 one heavy indent, #11 three heavy indents, #12 bottom bracket torn, #14 one indent.
Pipeline at shell aft protected by iron guards.
Side tank plating with seven scattered indents-exposed and unprotected.
After transverse bulkhead and vertical fluted sections-#2 one indent, #3 four sharp indents-scattered indents between fluted sections lower portion.
Pipeline at bulkhead protected by iron guards.

PORT SIDE:

After transverse bulkhead and vertical fluted sections-#1 three indents, #2 two indents, #4 four indents.
Access ladder at bulkhead with stringers waved and 20 rungs bent-exposed and unprotected.
Pipeline at bulkhead protected by iron guards.
Forward transverse bulkhead and vertical fluted sections-#1 scattered indents lower section, #2 two sharp indents, #3 one heavy indent upper section, #4 three heavy indents upper section.
Three horizontal stiffening brackets between fluted sections indented on edges.
Pipeline at shell forward protected by iron guard.
Shell frames damaged are as follows: #2 one indent, #3 pulled forward mid section, #5 one heavy indent, #8 one heavy indent lower section, #11 one indent upper section, #16 one heavy indent.
Pipeline at shell aft protected by iron guards.
Side tank plating with five light indents-exposed and unprotected.
Tank top plating with sharp and heavy scattered indents-exposed and unprotected
Electrical wiring and steam smothering lines running fore and aft under wing tank plating exposed and unprotected.

Exhibit K

#7 HOLD
STARBOARD SIDE:

Pipeline at forward transverse bulkhead protected full length by solid metal guards.

Vertical fluted sections #2, #3, and centerline at forward transverse bulkhead with scattered light to moderate indents.

Pipeline at shell forward protected full length by solid metal guards.

Shell frames damaged are as follows: #2 two moderate indents lower section, #4 lightly indented lower bracket flange, #9 moderately indented upper section, #15 three moderate indents at lower section, #18 two moderate indents lower section.

Pipeline at shell aft protected full length by solid metal guards.

Side tank plating exposed and unprotected with scattered light to moderate and three heavy indents at after section

After transverse bulkhead scat[illegible]ed light to moderate indents.

Pipeline at after transverse b[illegible]head exposed and unprotected lower [illegible]' protected by metal guards upper 12'.

PORT SIDE:

After transverse bulkhead with scattered light to moderate indents.

Pipelines at after transverse bulkhead exposed and unprotected lower 30' protected by solid metal guards upper 12.

Forward transverse bulkhead with two moderate and one light indent lower sectio

Vertical fluted sections #2, #3 at forward transverse bulkhead with scattered light indents.

Pipeline at forward transverse bulkhead protected full length by solid metal guards.

Access ladder at forward transverse bulkhead with stringers waved and moderatel indented at about 7' up from the bottom and at upper section 9 rungs bent.

Pipeline at shell forward protected full length by solid metal guards.

Shell frames damaged are as follows: #2 moderately indented lower section, #4 two moderate indents at about mid section, #6 moderately indented upper section and lower bracket flange, #9 one moderate indent lower bracket flange, #12 moderately indented lower bracket flange, #18 one heavy indent lower section.

Pipeline at shell aft protected full length by solid metal guards.

Side tank plating exposed and unprotected with scattered light to moderate and some heavy indents.

Hatch coaming plating at after end of hatch with three moderate indents.

Tank top plating exposed and unprotected with scattered moderate to heavy indents.

WEATHER DECK
PORT SIDE:

Pipe guard railing upper, lower and mid sections from #4 thru #6 hatches distorted lightly to moderately at various places.

Eighth section of pipe guard railing in way of #6 hatch missing for about 8'.

One section of pipe guard railing at masthouse forward of #5 hatch missing.

Pipelines running under hatch coamings from #1 thru #7 hatches protected by metal guards.

Lower section of pipe guard railing at masthouse of #4 hatch broken at one end.

Upper, mid andlower sections of pipe guard railings from #1 thru #3 hatches distorted slightly at various places.

One hatch coaming bracket in way of #2 hatch at mid section of hatch moderately indented and one hatch coaming bracket at after end of #2 hatch moderately indented

Mid section of pipe guard railing in way of #2 hatch broken at two places.

K-6

STARBOARD SIDE:

Pipelines running under hatch coamings from #1 thru #3 hatches protected by metal guards.

Upper, mid and lower sections of pipe guard railing from #1 thru #3 hatches slightly distorted at various places.

Lower and mid sections of pipe guard railing and pipe guard bracket aft of #2 hatch heavily distorted and broken at base bracket and railing at two different places.

Pipelines running under hatch coamings from #4 thru #7 hatches protected by metal guards.

Mid, lower and upper sections of pipe guard railing running from #4 thru #7 hatches distorted slightly to moderately at various places.

Upper section of pipe guard railing at masthouse forward of #5 hatch heavily distorted.

Vessel is equipped with McGregor type hatches sighted open. //

Vessel also equipped with booms sighted in an up right position with no particular damages noted.

SUMMARY OF INSPECTION:

The general condition of this vessel, as seen in compartments mentioned above were found with normal "wear and tear" such as nicks, cuts, and minor gouges on shell frames, bulkhead stiffeners, brackets, tank top, and bulkhead plating. This type of damage is normally found on a vessel of this age, engaged in the bulk cargo trade, where discharging by mechanical means has taken places over a period of time. Therefore, these items have not been enumerated or incorporated under "PARTICULAR FINDINGS".

The following recommendations are made:

1. That pipelines below, where exposed and unprotected, to be properly protected against possible damage from cargo of this nature.

2. That tank top and side plating be sheathed to prevent possible damage. //

K-7

Exhibit K

According to the vessels official papers, she has available for cargo, the following cubic capacities.

	GRAIN
#1 HOLD	88,892
#2 HOLD	170,156
#3 HOLD	187,920
#4 HOLD	193,112
#5 HOLD	164,187
#6 HOLD	155,640
#7 HOLD	149,107
	1,109,014

NOTE: There were no obstructions which would reduce the aforementioned cubic capacities.

SURVEY MADE AND THIS REPORT ISSUED WITHOUT PREJUDICE.

T. A. Nielsen
MARINE CLAIM SERVICES, INC.

TAN:kc

Certified correct and approved and issued without prejudice to the rights of whom it may concern.

TOPLIS & HARDING, INC.

BY: _____
Director LLOYD'S AGENCY

New York, New York
December 30, 1969
Reference No. 69-33444-MCS-2 0 0

K-8

J 520a

Exhibit O

(Master's Radio Report of Damage to Hatch)

[illegible] TELEX 22911

[illegible] VIA CAMERANCISCORADIO/ST [illegible]

URGENT [illegible] LONDON =

SPODRA THYELA ANIXE MACGREGORS NUMEROLIA KYTOUS [illegible]NATOS

[illegible] KYTOULOPO [illegible]NIAS MACGREGORS PLEOMEIME ILATOMENAS

STHOPAS ETA KINITSU 10TH+++

[illegible]

(1)

[illegible]

[illegible]

"

SEVERE STORM OPENED UP MACGREGORS OF NUMBER ONE HOLD IMPOSSIBLE MAKE SAME. WATERTIGHT DUE TO DAMAGE TO MACGREGORS PROCEEDING ON REDUCED RPM ETA KIMITSU 10TH.

"

O

J 521a

Exhibit P

40-293

LIVBROKERS LDN

(Master's Radio Report of S.O.S.)

VIA COMCABLES LONDON TELEX 22911

R. 0830 6/2/70.

TLX581 IAA462 HBA2550 SA047
GCLB CO UIMS 032
ANTONIOSDEMADES/SMSO VIA ITT SFRANRADIORADIOXKFS

C.-4503

32 6 211 EEE 6 2155GMT

LIVBROKERS LONDON

(2)

KATASTASIS PLIOU EPIKINDINOS PLION (PLION) SPONO 2 KEPLORA
EFAPTETE SCHEDON THALASSIS EDOSA SOS STOP PROSOPIKOS
PISTEVO OTIPLION DEN KINDINEVI EIPIARONTOS DEN EGATAL-
IPOMEN PLION EKTOS ESHATIS ANAGIS STOP KSFODRA
THALASSOTARAHIS EIMETHA TRAVERSOMENOI

COD 2
SENT 0825/7TH FEB
LIVBROKERS LDN

" CONDITION OF VESSEL DANGEROUS FROM ~~ACC~~
NUMBER 2 FORWARD VESSEL ALMOST DOWN TO
WATER LEVEL HAVE SENT S.O.S. STOP
PERSONALLY BELIEVE VESSEL NOT IN PERIL
~~FOR TIME~~ PRESENTLY NOT ABANDONING
VESSEL EXCEPT IN DIRE NEED STOP
VERY ROUGH SEA REMAINING HEAVING TO "

P

J 522a

Exhibit V

(Weather Data)

A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

MARINERS

VOLUME 14, NUMBER 4

JULY 1970

IN THIS ISSUE:

SPECIAL BEAUFORT FORCE SEA PHOTOGRAPHS

U.S. DEPARTMENT OF COMMERCE

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

Environmental Data Service

V-1

Exhibit V

The 22,600-ton American tanker CONNECTICUT was disabled and taking water in her stern tubes in a stormy sea about 260 mi south of San Francisco. Gales in the area were southerly and in the 40- to 45-kt bracket on the 8th-9th as a moderately strong cyclone moved ashore near the Oregon-California border. A number of ships stood by the stricken vessel, which had been on passage from Los Angeles to Yokohama with a cargo of jet fuel when she ran into trouble. Her well deck was awash when a Coast Guard helicopter lowered pumps to replace those idled by a power failure aboard. The skipper of the vessel said that there was an "emergency situation" but "no immediate danger of sinking." The 2,302-ton Japanese ship NAMISHIMA MARU, transporting coal, capsized and sank in heavy seas at 42.4°N., 139.7°E., off Cape Mitare. Only two of the crew were rescued whereas 18 were lost. The 4,860-ton vessel FORTUNE TRADER, flying the flag of Singapore, went aground in bad weather near 33.9°N., 129.6°E. Prior to the grounding, the ship had experienced rudder trouble. The engineroom subsequently flooded and the FORTUNE TRADER was abandoned by her crew. The 2,214-ton Philippine freighter STA. FE went aground 2 mi northeast of Sulat, eastern Samar. A salvage team was temporarily withdrawn due to heavy weather. The 11,161-ton Japanese vessel HONMOKU MARU, loaded with wheat, collided with the Liberian ship PABLOEVERETT in fog about 1 mi off Tomogashima. The HONMOKU MARU was holed in the port side by the no. 4 hold. Flooding resulted. Both vessels arrived at Osaka--the PABLOEVERETT with bow damage.

SMOOTH LOG, FEBRUARY 1970--There was a noticeable concentration of cyclone tracks over the northeastern ocean, especially east of the dateline to about 145° W. and north of 45° N. to the Gulf of Alaska and the southeastern Bering Sea. The Aleutian Low (986 mb) was 14 mb below normal and rested near 51°N., 176°W., or about 480 mi east-northeast of its mean February position. An associated negative 17-mb anomaly was located near 52° N., 170° W. Cyclone activity was below normal off the east and south coasts of Honshu.

A negative anomaly center of -6 mb was situated near 37° N., 140° W. This anomaly was an offshoot of the larger one centered south of the eastern Aleutian Islands. The 1021-mb Pacific High was centered near 25° N., 129° W., or 650 mi southeast of its average location for the month. A +4-mb anomaly east of the High settled near 24° N., 121° W. The Aleutian Low and Pacific High were the only mean pressure centers over the Pacific Ocean during February.

The first tropical cyclone of the 1970 season was a very severe typhoon which did not fall far short of supertyphoon intensity. Nancy was only the second February typhoon to develop over the western North Pacific since 1945. The other one made history in 1953. Counting Nancy, only seven tropical cyclones have unfolded during February since 1945--the last two, to precede Nancy, both developed in 1965.

Late on the 3d, a 1014-mb LOW formed over the Sea of Japan near 39° N., 139° E. The deepening cyclone moved over Honshu early on the 4th and then headed east-northeastward out into the North Pacific. Gales broke out in the northerly flow over the East China Sea at about 1200 on the 4th. Twenty-four hours later, the MAXIM near 40° N., 148° E., or 325 mi west of the 981-mb LOW, was hit by 48-kt gales, 33-ft seas, and 25-ft swells. During the cyclone's cold frontal passage, the VOLNAY near 32°N., 157°E. encountered somewhat stronger 50-kt winds during a violent rain shower. The C. E. DANT near 40°N., 160°E., and only a few miles ahead of the system's occluded front was shaken by 58-kt gales and heavy rains. The storm continued to deepen as it moved east-northeastward at about 25 kt. At 0000 on the 6th, the AMERICAN CHIEFTAN near 34°N., 159° E., or 475 mi south of the 976-mb cyclone, battled 55-kt winds and 36-ft swells. One hundred twenty-five miles west of the AMERICAN CHIEFTAN, the MOMIJISAN MARU clocked 50-kt gales. The ZOELLA LYKES topped both of these ships, however, when she measured 60-kt winds near 34°N., 162°E., during a heavy squall. The central pressure of the LOW fell to 956 mb by 0000 on the 7th as the center swung toward the northeast. The TEXADA near 50°N., 168°E., or 325 mi west-northwest of the cyclone, was battered by 60-kt near-hurricane-force winds. South-southwest of the tempest, the JAPAN HOLLY was struck by 55-kt winds and 25-ft swells during a shower near 40°N., 171°E. The storm's central pressure remained below 960 mb until early on the 8th. Two ships in the eastern Aleutians reported 50- to 55-kt winds at 1200 on the 7th. West-northwesterly winds as high as force 11 (58 kt) were measured in the subtropics by the OREGON near 28°N., 165°E. This ship with a 1017-mb pressure at 1200 was wedged between the 956-mb LOW and a 1029-mb HIGH near 30°N., 145°E. Some other ships within several hundred miles of the OREGON were hit by less severe gales. Twelve hours later, the PONCE near 36°N., 170°E., or 950 mi southwest of the storm, encountered 50-kt gales, 20-ft seas, and 30-ft swells after a thunderstorm.

Late on the 8th, the LOW underwent a compact cyclonic loop over the Andreanof Islands before it was absorbed north of Atka Island by a northwestward moving 970-mb cyclone early on the 10th. Winds in the southern semicircle of the original LOW remained barely above gale force until the absorption process was complete, but gales ended north of the cyclone late on the 9th.

A 1000-mb LOW developed 70 mi east of northern Honshu early on the 8th. The cyclone proceeded east-northeastward throughout the first 3 days of its life. During the next 2 days, the center made a wide 180° turn over 9° of latitude; it dissipated 50 mi east of central coastal Kamchatka early on the 16th. The storm possessed gales even in infancy. The ARGENTINA MARU near 33°N., 146°E., or about 375 mi south-southeast of the cyclone and in its warm sector, clocked 40-kt gales at 1200 on the 8th. Closer to the storm center, the ZOELLA LYKES near 35°N., 146°E. measured 45-kt winds. During the next 24 hr, the LOW deepened to 989 mb while moving to 42°N., 152°E. Another center (991 mb) appeared over Cape Shiretoko, Hokkaido, near midday on the 9th.

V-2

Exhibit V

At 0000 on the 10th, the HONDURAS MARU near 36° N., 144° E., or 175 mi east of Cape Inubo, Honshu, was rocked by northwesterly 55-kt winds. The OREGON near 32° N., 146° E., reported west-northwesterly 50-kt gales. Six hours later, the NANFRI near 32° N., 145° E. tangled with 58-kt winds and 30-ft seas. The pair of cyclones continued to intensify; they were now funneling northwesterly gales southeastward from mainland China to waters southwest of the OREGON and NANFRI. The captain and four crewmen lost their lives when the 34,001-ton Japanese iron ore carrier CALIFORNIA MARU sank in rough seas about 200 mi east of Tokyo after the vessel developed a crack in its bow. Three men taking pictures of the tragedy for television also lost their lives when their plane was forced [illegible]. Twenty-four of the crew were rescued by New Zealand and Japanese vessels. In Tokyo, Japanese shipbuilding experts started investigating this fourth sinking in the area in the past year. All four ships sank in similar wintry strong westerly wind conditions. The survivors of the calamity commended the captain for his bravery, and they said that he had kept them aboard the vessel until help was near. After seeing the men safely onto life rafts, however, the captain refused to abandon ship. He was last seen smiling and waving as the ship disappeared beneath the stormy waters. The four missing sailors left the vessel in its only undamaged lifeboat.

At 1200 on the 10th, the HONSHU MARU near 43° N., 147° E., or 365 mi west-southwest of the eastward moving more recent 976-mb LOW, battled 55-kt gales. Twenty-four hours later, the original 964-mb cyclone was starting its 180° turn near 49° N., 172° W. The central pressure dropped to 950 mb near Yunaska Island, Aleutian Islands, at 0000 on the 12th. After entering the Bering Sea, the LOW filled slowly during the next 4 days as it headed westward toward dissipation. Gale-force winds stayed with the system through the 13th. The newer LOW moved eastward until late on the 12th when it took a turn toward the northeast. The pressure of its center dropped to 968 mb at 1200 on the 13th; it held there for over 24 hr. Gales as high as 45 kt stayed with the storm through the 14th. At about 1600 that day, the cyclone crossed the Alaska Peninsula near Fort Randall. The LOW started filling after it reached the Bering Sea; it was absorbed by the initially discussed storm near 58° N., 172° W., early on the 15th.

Things were relatively quiet until the 19th when a 1015-mb LOW developed about 40 mi east of Chen-hai, mainland China, within a trough of low pressure left over by a dissipating cold front. The cyclone moved northeastward across South Korea later on the 19th, reaching the southern tip of Hokkaido by 1800 on the 20th. Six hours later, the 977-mb LOW was east of La Perouse Strait. Gales were then being reported from all quadrants of the deepening storm. High winds broke out in the northern and central Kurils as the storm spread its circulation over the islands on the 21st-22d. Ostrov Paramushir clocked 50-kt easterly winds at 1200 on the 21st and northwesterly gales climbed to at least 50 kt over the central Kurils by 0000 on the 22d. Gales grew to near-hurricane force over the central Kurils by 0000 on the 23d. At that time, Ostrov Ketoy clocked 60-kt winds some 700 mi southwest of the 964-mb LOW, then at its top strength. Shortly before 1200 on the 23d, the 966-mb cyclone gained entrance to the Bering Sea about midway between Ostrov Mednyy and Attu Island. Maximum wind speeds were then in the 40- to 50-kt bracket with 40-kt winds being reported from as far south as 56° N., 164° E. On the 24th, the storm was absorbed near 57° N., 179° E., by another 966-mb center which developed 275 mi east of the southern tip of Kamchatka early on the 23d. This newer cyclone filled rapidly near Kiska Island later on the 24th. Another center formed a few hundred miles west of there on the 25th, but we won't worry about that one because gales ceased over the area before reformation.

A trough of low pressure over the Korea Strait at 1200 on the 24th moved eastward across southern Honshu later that day. By 0000 on the 25th, a 1006-mb LOW had developed 60 mi east-southeast of Cape Inubo, Honshu. The deepening cyclone continued on a nearly direct easterly track until midday on the 26th. Gale-force winds fanned out from the LOW early on the 25th; they increased to at least 40 kt by 1200 that day as the central pressure of the cyclone dropped to 994 mb. The storm's winds rose to near-hurricane force by 0000 on the 26th. The BANJA LUKA near 34° N., 161° E., or 250 mi southwest of the 984-mb cyclone, was hit by westerly 60-kt gales and 20-ft seas during a heavy rain shower associated with a cold frontal passage. The 969-mb LOW curved toward the northeast on the 26th. At 0000 on the 27th, the UREA MARU near 43° N., 176° W., or 225 mi northeast of the 965-mb cyclone, was blasted by 60-kt gales in advance of the system's occluded front. The TETELA near 36° N., 176° E. was smacked by 55-kt gales and 26-ft seas during a squall. The TINDALO near 36° N., 175° E. wrestled with 48-kt winds. The LOW dropped to 960 mb at 1200 on the 27th, but not a single ship report was received that was within 350 mi of the center, then near 44° N., 179° W. It is probable, however, that hurricane-force winds whirled around the LOW at that hour.

Later on the 27th, the cyclone adopted an almost due northerly course while decreasing in strength. By 0000 on March 1, the central pressure of the LOW had risen to 978 mb near the central Aleutian Delaroff Islands. At that time, several ships still encountered gale-force winds southwest of the center. The center entered the Bering Sea and swung toward the west-northwest, moving parallel to the western Aleutians. By 0000 on the 2d, the 988-mb LOW was east of Kamchatka near 54° N., 166° E. Heavy snow from the storm fell over southern Kamchatka. Gale-force northwesterly winds were reported from the Kuril Strait at 1200 on the 2d. Twelve hours later, the identity of the cyclone was lost within the circulation of a very intense 953-mb LOW near 47° N., 178° E.

The storm that would become typhoon Nancy developed near 8° N., 150° E., late on the 19th. Cyclonic winds of 10-20 kt had been blowing over the disturbed area, centered near 6.5° N., 151.5° E., since the 18th. Nancy, packing 40-kt gales, passed 20 mi southwest of Namoniuto Island, where 19-kt winds were reported, and 45 mi northeast of Puluwat Atoll, where winds were

V-3

Exhibit V

Vessel	Nationality	Date	Position: Lat. deg	Position: Long. deg	Time GCT	Wind: Dir.	Wind: Speed kt	Visibility n mi	Present Weather code	Pressure mb	Temperature: Air °F	Temperature: Sea °F	Sea: Direction	Sea: Height ft	Swell: Direction	Swell: Period sec	Swell: Height ft
NORTH PACIFIC OCEAN		FEB															
MV MARIN	LIBERIAN	3	40.3 N	148.1 E	12	15	NE 48	.25	70	998.8	8.0	2.0	7	32.5			
SS PONCE	AMERICAN	3	39.2 N	154.6 E	18	27	55	8	27	1006.8	7.8	15.6	4	13			
MV GRIPLAND	SWEDISH	4	38.1 N	154.1 E	00	29	53	5	25	1012.8	12.6	16.3	11	32.9			
MV VOLNAY	BRITISH	4	32.1 N	144.7 E	00	32	48	5	42	1010.3	12.0						
SS IDELLA LYKES	AMERICAN	4	34.4 N	162.0 E	06	24	N 80	5	16	997.6	13.6	16.7	3	14.8			
USCG CONFIDENCE	AMERICAN	6	52.4 N	168.4 W	06	01	N 55	10	02	991.9	1.7	4.3					
SS PIONEER COMMANDER	AMERICAN	6	34.0 N	152.8 E	00	32	45	10	01	1008.5	8.9	17.2	3	6.5	29	12	29.5
SS PONCE	AMERICAN	6	38.2 N	150.4 E	06	27	58	2	07	997.0	6.7	17.8	2	10.5	17	14	21
SS AMER CHEIFTAIN	AMERICAN	6	46.4 N	179.1 E	18	29	45	5	15	1002.4	13.2	15.0	12	14.5	26	11	30
SS IDAHO STANDARD	AMERICAN	6	34.8 N	152.8 W	0	30	45	10	01	1007.2	8.4	13.9	3	8			
SS H D COLLIER	AMERICAN	7	39.7 N	141.8 W	12	32	45	2	18	1009.1	11.7	19.4					
SS HAWAIIAN RANCHER	AMERICAN	7	34.6 N	145.1 W	00	31	50	5	80	1007.0	10.7	21.7	8	10			
SS IDELLA LYKES	AMERICAN	7	34.6 N	157.3 E	00	31	N 45	5	18	1013.9	7.8	15.9	3	10			
USCG CONFIDENCE	AMERICAN	7	54.1 N	164.3 W	18	11	N 38	5	02	988.2	1.0	6.4					
SS PONCE	AMERICAN	7	38.9 N	168.2 E	18	33	50	10	02	1008.0	7.8	14.4	9	13	28	9	19.5
MV ACSE	LIBERIAN	7	38.2 N	174.8 E	00	27	50	5	02	989.0	10.0	12.0	8	16.5	27	7	28.5
SS OREGON	AMERICAN	7	27.8 N	168.0 E	12	30	N 50	10	01	1016.6	10.7	22.4	2	13			
SS STEEL SEAFARER	AMERICAN	7	31.2 N	132.2 W	12	16	45	5	02	1008.0	14.4	16.1	8	10			
MV AYTYLAN	SWEDISH	7	37.3 N	169.1 W	18	18	30	2	61	1000.3	11.0	12.0					
SS AMER CHEIFTAIN	AMERICAN	7	34.6 N	153.8 E	00	32	45	10	18	1020.7	6.2	18.7					
SS HONGKONG MAIL	AMERICAN	7	32.5 N	167.0 W	18	10	48	5	71	980.8	1.7	2.8	10	14.5			
SS IDAHO STANDARD	AMERICAN	7	33.7 N	158.8 W	00	29	48	10	02	1014.5	10.6	15.3	12	10.5			
SS PONCE	AMERICAN	8	36.0 N	169.5 E	00	33	50	5	91	1010.9	4.4	19.7	8	19.8	34	8	29.5
SS IDELLA LYKES	AMERICAN	8	34.7 N	148.7 E	12	23	N 45	10	02	1012.5	10.7	12.2	3	6.5			
MV HAMPAI	NORWEGIAN	9	31.5 N	148.7 E	18	29	50	5	03	1008.0	15.8	16.4		24.8			
SS OREGON	AMERICAN	9	30.9 N	148.2 E	12	19	N 50	5	18	1007.5	10.7	18.9	8	8			
MV ACSE	LIBERIAN	9	38.4 N	165.8 E	12	33	47	10	02	1008.0	12.0	14.0	3	11.5	23	7	19.5
SS ISABELLE LYKES	AMERICAN	9	10.3 N	148 7 E	00	03	45	5	80	1011.9	26.4	28.2	8	13			
SS HEI TSUNG	CHINESE	9	32.7 N	156 0 W	18	12	42	2	58	979.0	4.0	9.2	8	13	13	14	19.8
USCG CONFIDENCE	AMERICAN	9	53.6 N	159 0 W	18	07	N 50	5	03	986.1	1.2	4.5	3	13			
MV SVARD	NORWEGIAN	9	34.4 N	148 8 E	18	27	48	10	02	1004.2	10.1	18.1	14	24.5			
MV VOLNAY	BRITISH	10	41.5 N	142 7 E	00	28	50	1	75	994.8	- 1.0						
SS UNIVERSE CONVEYOR	LIBERIAN	10	28.1 N	149.7 E	06	28	44	10	03	1009.0	17.9	21.2	7	13			
MV SVARD	NORWEGIAN	10	34.0 N	148.5 E	06	30	45	10	81	1005.5	11.7	18.0	15	26			
USCG CONFIDENCE	AMERICAN	10	56.2 N	158.2 W	06	17	N 45	5	02	986.1	10.5	6.5					
SS OREGON	AMERICAN	10	31.5 N	146.4 E	00	29	N 50	10	01	1009.5	15.0	18.5	8	10			
MV NANPAT	NORWEGIAN	10	32.1 N	144.5 E	06	30	58	5	02	1012.0	11.3	18.2	12	29.5			
MV ACSE	LIBERIAN	10	33.6 N	160.6 E	12	33	48	10	03	998.0	18.0	19.8	7	18			
MV POLAR COLOMBIA	GERMAN	10	34.1 N	148.5 E	06	30	47	5	15	1008.0	9.8	18.0	11	16.5			
SS OVERSEAS ALICE	AMERICAN	10	36.3 N	147.2 W	00	11	45	5	02	1006.4	9.3	4.4	6	14.5			
MV MICOLINE MAERSK	DANISH	10	0 N	96.1 W	12	05	42	10	02	1012.5	23.2	25.0	9	13			
MV POLAR BRASIL	GERMAN	10	33.3 N	147.8 E	00	29	44	10	15	1006.5	12.1	18.2	8	19.5			
MV MOLLINGER	NORWEGIAN	10	15.8 N	98.0 W	12	35	45	2	05	1009.2	21.9	29.5	6	10			
MV JARICHE	NORWEGIAN	10	3 N	138.8 E	06	29	48	10	03	1010.0	18.1	19.2	6	11.5			
MV SALVINA	BRITISH	11	35.0 N	162.7 E	06	27	47	7	27	1002.1	9.4	10.0	8	16			
MV SANTA ROSA MARU	JAPANESE	11	43.3 N	172.2 W	12	26	N 45	.8	25	978.5	7.0	8.0					
SS GAINES MILL	AMERICAN	11	29.2 N	147.8 W	00	25	58	5	01	1012.9	11.7	17.8					
MV SVARD	NORWEGIAN	11	32.6 N	156.9 E	06	33	42	10	81	1013.9	11.8	18.7	12	26			
MV MAYSAK	NORWEGIAN	11	47.2 N	120.0 W	18	32	45	10	03	1011.0	7.0	12.0	8	13			
MV ACSE	LIBERIAN	11	34.4 N	161.7 E	06	27	50	5	02	999.0	2.0	16.0	7	19.5			
SS ORIENTAL PEARL	LIBERIAN	11	34.2 N	160.7 E	06	30	45	2	82	1001.7	8.9	13.0	10	13			
SS STEEL NAVIGATOR	AMERICAN	11	38.0 N	178.8 W	00	22	50	5	01	991.2	13.9	11.7	12	20.5			
MV JARICHA	NORWEGIAN	11	31.9 N	150.2 E	00	29	46	23	03	1015.0	15.0	16.0	9	14.5			
SS MICHIGAN	AMERICAN	11	29.3 N	150.2 E	00	29	45	10	02	1015.8	13.4	16.7	4	10			
SS MARINE PIONEER	AMERICAN	11	27.7 N	136.2 W	18	28	45	10	08	1014.6	16.3	15.6	2	10.5			
MV SIERRA	NORWEGIAN	12	36.4 N	176.7 E	00	28	42	10	01	1007.0	17.0	18.0	12	13			
MV SALVINA	BRITISH	12	34.9 N	168.3 E	00	29	45	5	25	1012.0	10.6	16.8	8	11.5			
USCG CONFIDENCE	AMERICAN	12	54.6 N	161.4 W	00	10	N 30	5	03	980.0	1.5	4.3	8	16.5			
SS PACE POLK	AMERICAN	12	31.9 N	161.9 W	12	22	45	10	02	1008.7	16.2	15.8	9	11.5	20	9	11.5
SS PONCE	AMERICAN	12	35.3 N	159.3 W	12	30	55	5	02	996.0	10.4	15.9	9	11.5	21	8	20.8
SS JOHN DAVIS	AMERICAN	12	33.7 N	169.5 W	00	22	44	7	02	998.2	10.7	13.9	8	10			
MV JAPAN ELM	JAPANESE	12	34.6 N	170.5 W	00	07	N 42	1	22	997.5	1.8	6.8	9	16.5			
SS ACHILLES	AMERICAN	14	58.0 N	181.4 W	06	07	43	2	07		4.4	6.4	4	10			
SS UTAH STANDARD	AMERICAN	15	46.0 N	128.0 W	18	18	50	5	01	1010.7	12.9	10.0	8	16.0			
SS HAWAIIAN MONARCH	AMERICAN	15	30.2 N	142.6 W	00	18	N 45	8	08	1006.6	17.8	19.2	6	9.5			
USNS PURMAN	AMERICAN	15	35.8 N	138.8 W	18	18	N 42	2	21	1005.8	16.6	19.8	2	10	22	9	12
MV HOKOKU MARU	JAPANESE	16	42.6 N	180.4 E	00	30	N 43	2	78	1002.3	- 3.0	2.9	9	13	31	10	16.0
SS UTAH STANDARD	AMERICAN	16	42.9 N	129.1 W	06	16	50	5	01	1004.0	10.6	11.1	6	13.5			
SS HENNINGTON	AMERICAN	16	43.3 N	124.7 W	06	17	48	2	00	1008.0	10.0	12.0	6	14.5	29	12	24.0
SS YUKON	AMERICAN	16	39.5 N	139.0 W	00	16	45	5	02	1013.9	11.8	13.4	6	8			
MV RITA MAERSK	DANISH	17	34.2 N	164.7 W	06	20	50	.5		1000.9	18.5	16.5	8	24			
SS GENEVA	AMERICAN	17	16.0 N	94.6 W	00	26	50	8	02	1010.8	21.7	26.7					
MV SVARD	NORWEGIAN	17	32.6 N	162.9 W	12	22	42	.5	82	1004.2	10.1	18.0					
SS SEAMAR	AMERICAN	17	18.9 N	98.8 W	06	36	50	10	09	1015.9	23.0	26.7	4	10.5			
MV RITA MAERSK	DANISH	18	33.9 N	168.2 W	00	27	48	2	25	1002.0	11.5	14.0	3	19.5			
SS CHEVRON TRANSPORTER	LIBERIAN	18	39.6 N	166.3 W	12	20	46	2	66	1008.1	12.0	9.0	8	20			
MV PERU MARU	JAPANESE	21	32.7 N	176.8 W	00	27	N 43	5	01	1003.0	14.0	16.0	8	14.5	27	12	21
MV HOKOKU MARU	JAPANESE	22	47.4 N	184.7 W	12	27	N 45	5	02	997.0	8.0	9.5	7	10			
MV EASTERN BUILDER	LIBERIAN	22	45.7 N	150.6 E	06	28	47	10	01	988.0	3.0	9.0	8	13			
MV ST LAWRENCE MARU	JAPANESE	22	40.8 N	164.2 E	00	14	N 42	5	03	996.5	18.0	11.0	6	14.5			
SS ACHILLES	AMERICAN	23	52.0 N	137.8 W	18	29	45	5	81	1009.1	8.7	8.6	4	10	20	8	13
SS MOBIL OIL	AMERICAN	24	49.1 N	134.4 W	00	34	45	2	07	998.5	8.7	9.0	4	10			
SS PORTUNA	AMERICAN	24	56.1 N	136.7 W	00	13	30	5	02	1008.9	9.8	9.0	4	16.5			
MV HONSHU MARU	JAPANESE	26	43.9 N	130.8 W	12	34	N 50	1	33	1016.0	8.0	9.5	12	19.5			
SS KEYSTONE STATE	AMERICAN	28	25.0 N	159.5 E	06	28	48	5	03	1009.8	12.2	17.2	7	8			
SS PRES MCKINLEY (MEN)	AMERICAN	26	38.6 N	139.8 E	06	31	45	2	07	1011.2	10.1	10.7	8	10	31	9	20.0
MV GORANA	YUGOSLAV	26	39.2 N	158.2 E	00	32	52	1	10	1003.0	7.8	10.5	8	19.8			
MV EASTERN BUILDER	LIBERIAN	26	41.0 N	178.2 E	18	11	41	1	59	977.0	7.2	10.0	8	13			
SS BELGIANC	AMERICAN	26	34.4 N	150.. E	06	34	50	5	11	1003.5	11.2	15.6	9	16.5			
MV TINGALO	PHILIPPINE	26	38.1 N	175.0 E	12	27	N 48	.5	59	979.7	8.0	12.2	13	13			
MV EASTERN BUILDER	LIBERIAN	27	41.4 N	173.3 E	06	34	48	1	59	988.0	8.0	10.0	7	16.5			
SS TRENTON	AMERICAN	27	[illegible]	176.5 E	[illegible]	[illegible]	47	5	64	995.0	10.0	11.1	10	19.5			
SS TOTOLA	HONDURAN	27	36.. N	170.0 E	06	27	55	2	18	996.2	7.8	10.4	8	20			
MV TINGALO	PHILIPPINE	27	38.4 N	174.7 E	06	28	N 48	.5	52	994.7	9.0	11.7	10	16			
SS TRENTON	AMERICAN	28	37.5 N	171.1 W	00	28	45	10	18	1000.8	10.0	9.4	15	24.8			

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Exhibit BB

BB

INTERNATIONAL (Load Line Certificate dated April 15, 1969)

Issued under the provisions of the International Convention on Load Lines, 1966, under the authority of the Government of the

REPUBLIC OF LIBERIA

by the American Bureau of Shipping

61-19,293-2
Certificate No.

Name of Ship	Distinctive number or letters	Port of Registry	Length(L) as defined in Article 2(8)
ANTONIOS DEMADES	1881	MONROVIA, LIBERIA	589'-6"

Freeboard assigned as: • ~~A new ship~~ / An existing ship

Type of Ship • ~~Type "A"~~ / ~~Type "B"~~ / Type "B" with reduced freeboard / ~~Type "B" with increased freeboard~~

• Delete whatever is inapplicable.

	Freeboard from deck line				*Load Line*	
Tropical	10	feet	0-3/4	inches (T)	9	inches above (S)
Summer	10	feet	9-3/4	inches (S)		Upper edge of line through center of ring
Winter	11	feet	6-3/4	inches (W)	9	inches below (S)
Winter North Atlantic	12	feet	0-3/4	inches (WNA)	15	inches below (S)

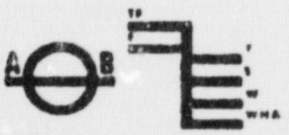
Note: Freeboards and load lines which are not applicable need not be entered on the certificate.

Allowance for fresh water for all freeboards 9-1/2 inches.

The upper edge of the deck line from which these freeboards are measured is NO inches ABOVE THE TOP OF THE STEEL UPPER deck at side.

To: [illegible]

Maritime Brokers, Inc.
1 Whitehall Street
New York, N.Y. 10004



Date of initial or periodical survey JANUARY 29, 1969

THIS IS TO CERTIFY that this ship has been surveyed and that the freeboards have been assigned and load lines shown above have been marked in accordance with the International Convention on Load Lines, 1966.

This Certificate is valid until JUNE 30, 1972, subject to periodical inspections in accordance with Article 14(1)(c) of the Convention.

Issued at New York, N. Y. APRIL 15, 1969

The undersigned declares that he is duly authorized by the said Government to issue this Certificate.

Fee $25.00 APR 21 196[illegible]
credit Misc
2-70.365

J. R. Bladsly
Secretary
American Bureau of Shipping

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Notes:

1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.

2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of the fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.

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Exhibit BB

THIS IS TO CERTIFY that at a periodical inspection required by Article 14(1)(c) of the Convention, this ship was found to comply with the relevant provisions of the Convention.

Place ..... Date .....

(Signature) Surveyor to the American Bureau of Shipping

Place ..... Date .....

(Signature) Surveyor to the American Bureau of Shipping

Place ..... Date .....

(Signature) Surveyor to the American Bureau of Shipping

Place ..... Date .....

(Signature) Surveyor to the American Bureau of Shipping

The provisions of this Convention being fully complied with by this ship, the validity of this Certificate is, in accordance with Article 19(2) of the Convention, extended until .....

Place ..... Date .....

(Signature) Surveyor to the American Bureau of Shipping

ARTICLE 14(1)(c): A periodical inspection within three months either way of each annual anniversary date of the Certificate, to ensure that alterations have not been made to the hull or superstructures which would affect the calculations determining the position of the load line and so as to ensure the maintenance in an effective condition of fittings and appliances for:

(i) protection of openings;

(ii) guard rails;

(iii) freeing ports; and

(iv) means of access to crew's quarters.

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Exhibit CC (Excerpts)

(Deposition of Nikolaos Ntaginis) 3

DIRECT EXAMINATION BY MR. ALLEN:

Q Will you please state your name?

A Nikolaos Ntaginis.

Q What is your nationality?

A I'm Greek.

Q What is your home address?

A I reside at Alatsaton 5, Aghios Ionnis Rentis, Piraeus, Greece.

Q What ship are you presently serving on?

A Atlantic Hero.

Q What is your position on that ship?

A Second Engineer.

Q Did you fly to New York from that ship to testify today?

A Yes.

Q Were you on the Antonios Demades in the early part of 1970?

A Yes.

Q For, approximately how many months were you on that ship?

A 19 months, about.

Q In what capacity?

A Third Engineer.

Q Do you remember the last voyage starting in New

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York and Boston before the ship sank?

A Yes, I do.

Q What watch were you standing on that trip?

A 8:00 to 12:00.

Q Were there other officers and engineering personnel on the ship?

A Yes.

Q Did the ship have all the people they needed and all the equipment and supplies that they needed in the Engine Room?

A Yes.

Q Did you have any trouble either in the Engine Room or any place else on that voyage before you hit that last storm?

A No.

Q Was everything working in good condition?

MR. JACOBSEN: Objection; leading question.

A Yes.

Q Did you have anything to do with the bunkering at the Panama Canal?

A No.

Q Do you remember that the ship ran into some heavy weather after she crossed the International Date Line?

A You mean 180?

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Q Yes.

A Yes.

Q Can you describe this weather?

A It was very bad weather. Very cold and hail.

Q What was the condition of the sea and the waves?

A Very heavy seas, up to 50 feet.

Q Did there come a time when you were asked to go forward with respect to some trouble up around No. 1 hatch?

A Yes, and I did try to go. However, I was prevented by heavy weather.

Q What was the trouble up at No. 1?

A I don't know.

Q How far forward did you go?

A Up to No. 3 platform.

Q That is the platform overlooking No. 3 hatch?

A Yes.

Q Why didn't you go any further forward?

A Because I could not go.

Q What prevented you from going?

A The bad weather.

Q What had you intended to do if you could have gotten up there forward?

A To pump out the bilges of No. 1.

Q Where is the pump that pumps out No. 1?

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A Between holds No. 1 and 2.

Q How do you get there?

A You go by walking on deck.

Q Do you go directly into the pump room from the deck or do you have to go in the mast house first?

A You open first one door, then you open another door, which is secured with dogs, and then you enter a ladder which is leading to that pump room?

Q Is the first door in the mast house there?

A Yes.

Q Have you ever gone down to that pump room and pumped out No. 1 yourself?

A Yes, sir.

Q If No. 1 hold was full of water and the seas were coming into it continuously, because half of the hatch was uncovered, would it have done any good to pump No. 1?

A If it was covered it would have made a difference, but since it was all uncovered, you couldn't.

Q It wouldn't have made any difference?

A If it would have been closed, I would have pumped the water out, but if it was open, it would make no difference.

Q If the hatch was open and the water was constantly coming in, could the pump have kept ahead of the water?

A No.

CC-4

Q At any time, did you go forward and look at No. 1 after the damage occurred?

A No.

Q After you looked out and decided not to go forward, then what did you do?

A I stood there, and I saw that I could not go any further.

Q Then what did you do?

A I went back to the after accommodation.

Q Did you go down into the Engine Room at any time before you went on watch that night?

A Yes. Sometime between 4:00 to 5:00.

Q Can you tell me what, if anything, was being done with respect to the pumps, at that time?

A You mean if they were in good order?

Q We'll get to that. Were they working or were they not working, at that time?

A They were working.

Q Which ones were working, at that time?

A The ballast.

Q What section or compartment or hold was it working on?

A You mean where it is located or from where it was pumping?

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Q What space were they pumping from, at that time?

A No. 2.

Q Did you learn, at that time, why they were doing that?

A No.

Q First of all, what pumps did you have in the Engine Room for pumping out cargo spaces?

A Ballast, centrifugal or bilge.

Q Now, what lines are there to pump water out of the cargo spaces?

A There are lines to pump the double bottom and lines to pump out the bilges of the holds.

Q Were all these pumps regularly tested during the voyage?

A Yes, sir.

MR. JACOBSEN: Objection; leading question.

Q How often were they tested?

A About once a week.

Q When was the last time you actually saw both these ballast pumps in use before the storm?

A The Second Engineer was testing them.

Q When was the last time before the storm that they used the ballast pumps to pump ballast in or out of the ship?

A When he take out the cargo, then he want to take

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the water out, he take the water out, the water is taken.

Q Do you remember the last time that was done before this storm?

A That we pumped out the cargo holds?

Q Or ballast.

THE INTERPRETER: He needs the question to be repeated.

Q Did you pump out any ballast before loading the ship at New York or Boston?

A How can we load without taking out the ballast?

MR. ALIEN: Tell him don't ask questions, just say yes or no, if he can.

A Yes, we did pump out water.

Q You remember then pumping ballast out at New York or Boston?

A Yes.

Q Did they use the ballast pumps, and were they in good working order?

MR. JACOBSEN: Objection; leading question.

A Yes.

Q What was the condition of those pumps, at that time?

A Good.

Q How many pipe lines are there for pumping water out of a cargo space?

CC-7

A One line for the double bottom and one for the bilges, which makes two.

Q Then there is only one bilge line in the ship, is that correct?

A I told you there's one line for the double bottoms and one for the holds.

I meant to say one port and one starboard.

Q Do you know, approximately, what size those lines were?

A Five to six inch.

Q Can you hook them on to either a bilge pump or a ballast pump?

A Yes.

Q Now, did you go on watch the night before the ship sank?

A Yes.

Q What watch did you stand?

A 8:00 to 12:00.

Q What was the condition of the weather when you went on watch?

A Very rough.

Q When you went down below in the Engine Room, was the ship on an even keel or not?

A No.

CC-8

Q How much of a list was there, if you remember?

A 15 to 18 degrees.

Q Do you remember what side of the ship?

A Starboard side.

Q What was the pumping situation when you came on watch?

Were any pumps in operation, and, if so, which ones?

A Yes. Ballast pump was working for No. 2.

Q Anything else?

A And the bilge. One was pumping out the double bottom and the other was pumping out the hold.

Q You're talking about the bilge pumps now?

A Yes.

Q What hold was the bilge pump working on?

A From No. 2.

Q The bilge was pumping No. 2 and the ballast was pumping No. 2?

A No. The ballast was pumping out No. 3.

Q Stop and think.

You were pumping No. 2 and No. 3. Which was the bilge pump and which was the ballast pump?

A Ballast pump was pumping out No. 3 and the bilge pump was pumping out No. 2.

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Q Was the ballast pump working on one line and the bilge pump on another line?

A We said that one was pumping out double bottom and the other was pumping out the hold.

Q Let's just stick to the ballast pump now.

Which line was that connected to?

A For deballasting, not for ballasting.

Q All right, for deballasting.

Which line was that, the port or the starboard line?

A Starboard.

Q How could you tell which compartment it was pumping?

A There are valves.

Q You can tell by looking at the valves which one was open and which one was shut?

A Yes.

Q Wasn't the ballast pump working on No. 2?

A What do you mean "ballast"?

Q I'm talking about the ballast pump.

Do you understand what I'm talking about, the ballast pump?

THE INTERPRETER: He doesn't know the Greek word for ballast.

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MR. ALLEN: Off the record.

(Discussion off the record.)

Q What is the name of the pump that you used to take water out of the hold?

A Ballast.

Q Wasn't that pump working on No. 2 when you were on watch?

A Yes.

Q Is it correct that the bilge pump was working on No. 3?

A The bilge pump is used for pumping out the cargo hold, and the ballast pump is used for pumping out the double bottoms.

Q But can't you put the ballast pump on the bilge suction line?

A Yes, you can.

Q Was that being done when you were on watch?

THE INTERPRETER: In Greek ships, I know that the engineers, although they are not familiar with the English language, they will be using English terminology on certain machinery, and that may be the reason that this witness is somewhat confused. He may not know the Greek word, because it's not used too often.

A Yes.

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Q Did that pumping continue through your watch?

A Up to 2:00 o'clock, after midnight.

Q Does that mean that you stayed in the Engine Room for a while after your watch ended?

A Yes. For two more hours.

Q Were any of the senior engineer officers there during your watch and afterwards?

A The Second Engineer.

Q Where was the Chief?

A He was coming down -- coming up again, at times.

Q Now, when you finally left the Engine Room, what did you do?

A I went to have my meal, and then to bed, because I was tired.

Q Did the ship still have a list?

A Yes, sir.

Q What was the condition of the weather when you went to bed?

A Very rough. I went to bed because I was tired.

Q What time did you wake up or get up?

A At 4:00 o'clock with the alarm.

Q When you got up, what did you find out?

A I found everybody up.

Q Were there any orders from the bridge to do

CC-12

anything?

A All engineers to be in the Engine Room.

Q Did you go down in the Engine Room until you were ordered to abandon ship?

A Yes, sir.

Q Were the pumps still running?

A Yes.

Q When you left the ship, was it daylight or could you see?

A It was 8:30 in the morning, but the water was very rough and dark and hail.

Q Did you go forward so that you could see what the condition of the ship was forward of the bridge house?

A No. You mean at 8:00 o'clock in the morning?

Q Yes.

A No.

Q Could you tell what the condition was up forward from where you stood?

A The ship was -- then water up to the gangway, when we abandoned her.

Q Were you picked up by the Chile Maru and taken to Japan?

A Yes.

Q Did some people come to the hotel room and take

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STENOTYPE AND SHORTHAND REPORTERS

A Yes.

Q Is this your statement (handing)?

A Yes, sir.

MR. ALLEN: Let's mark that for identification.

(The above described document was marked Defendant's Exhibit A for identification.)

Q Do you remember the normal fuel consumption on that ship when she was steaming along in ordinary weather?

A 32 to 33 tons.

Q Is that per day?

A Yes. Twenty-four hours.

Q How about diesel oil?

A Between 1 and 1/2 to 2 tons daily.

Q What was the normal speed of that vessel?

A 14 knots.

MR. ALLEN: That's all.

CROSS EXAMINATION BY MR. JACOBSEN:

Q Have you been sailing on Livanos ships since February, 1970?

A Yes, sir.

Q Can you tell us, approximately, how many ships you have been on since the Antonios Demades?

A Three ships.

Q Were any of them of the same type characteristics

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A It's shown on the document.

Q What year?

A 1972.

Q Now, on February 6, 1970, on the Antonios Da ides, according to your statement, you were asleep in your cabin when you were told to report to the bridge, is that correct?

A Yes, sir.

Q Then you had come off watch at 1200 prior to 1400, had lunch, and then gone to sleep, is that right?

A Right.

Q Now, you went up to the platform above the No. 3 hatch. Is that just aft of the No.3 hatch?

A Forward.

Q To the forward of No. 3 hatch?

A The platform is here (indicating) and No. 3 hatch is here (indicating).

Q Were you between No. 2 and No. 3?

A After.

Q After No. 3?

A Yes.

Q Between No. 3 and No. 4?

A It's right in front of the bridge.

Q Now, the Captain and the bosun went forward to the mast house above No. 1, did they not?

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right?

A Yes, sir.

Q What was the reason for your going to the Engine Room at, I believe you said, 4:00 to 5:00 P.M. on the 6th of February?

A To help in the situation.

Q Were you called there?

A Yes.

Q How long were you down there in that interval?

A Three hours. From 5:00 to 8:00 o'clock.

Q You were there from 5:00 to 8:00 o'clock?

A Yes.

Q Then you went on watch at 8:00 o'clock?

A Yes.

Q Now, you testified you went down there at 5:00 o'clock, is that correct?

A Yes.

Q You testified that pumping was going on?

A Yes.

Q Were any of the double bottoms being pumped at that time or thereafter?

A They were pumping out double bottoms.

Q Which double bottoms were they pumping out?

A No. 2.

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Q What about No. 1?

A No. 1, you cannot pump it out from there, you have to pump it out from the pump room.

Q From the pump room up forward?

A Yes.

Q Were the double bottoms under No. 3 being pumped?

A Afterwards I continued. I continued.

Q What do you mean by afterwards?

A Later when I took over watch.

Q After 2000?

A Yes.

Q At that time, were the bouble bottoms under the No. 3 being pumped?

A Yes.

Q Now, at 5:00 P.M., 1700, when you went down in the Engine Room, was No. 2 cargo hold being pumped?

A Yes.

Q Was No. 3 cargo hold being pumped?

A I pumped it out.

Q Which one?

A No. 3 at 8:00 o'clock.

Q No. 3 cargo hold?

A Yes.

Q Now, this pumping of No. 3 cargo hold and No. 2

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cargo hold, was it intermittent or continuous?

A Continuous.

Q Once it started, it continued, is that right?

A Right.

Q Is that also true of the double bottoms under No. 2 and No. 3?

A Yes.

Q Can you tell us, approximately, when the pumping first started on the double bottoms under No. 2, the double bottoms under No. 3, No. 2 cargo hold and No. 3 cargo hold?

A When I went down --

Q At 5:00 P.M.?

A Yes. They were being pumped out.

Q All of these?

A Yes.

Q And the pumping contined from then on?

A Yes.

Q I'm referring both to double bottoms and to No. 3 and 2 cargo holds?

A Ballast and bilge.

Q The pumps that were being used were the ballast pump and the bilge pump?

A Yes.

Q How many pumps in all were being used?

CC-V

A Ballast and bilge.

Q Is that two or four?

A One ballast and two bilge.

Q Three pumps in all?

A Yes.

Q But were four compartments being pumped at one time with three pumps?

A You didn't pump all of them simultaneously. The ballast pump was pumping out the double bottoms and the bilge pump was pumping out the cargo holds.

MR. JACOBSEN: Off the record.

(Discussion off the record.)

MR. JACOBSEN: Mr. Interpreter, you asked him if he understood.

Did he understand the testimony we have concerning the double bottoms?

THE INTERPRETER: Yes, he seems to understand what the bilges are and what the double bottom is.

Q Here is Trial Exhibit No. 10, which is the general arragement plan of the Antonios Demades.

I show it to you so we will know for sure what compartments we're talking about.

This is Hold No. 1, is it not?

A Yes.

CC-19

Q This is the double bottom area under No. 1 hold?

A Yes.

Q This is the forward pump room, that we have been talking about, for No. 1?

A Yes.

Q This is No. 2 cargo hold?

A Yes.

Q This is the double bottom under No. 2?

A Yes.

Q This is No. 3 cargo hold?

A Yes.

Q This is the double bottom under No. 3?

A Yes.

Q On the general arrangement plan, which is Trial Exhibit 10, in English it shows what we have just said, holds and double bottoms, in the English language.

Can you read the English language as far as double bottoms and holds are concerned?

A Yes.

Q Now, if I understand your testimony right, on the 6th, after you went down in the Engine Room at 1700, cargo compartment No. 2, cargo compartment No. 3 and the double bottoms under No. 2 and No. 3 all were being pumped out?

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A Yes.

Q After 1700?

A Yes.

Q And this pumping continued thereafter?

A Yes. Here was the location that I stood (indicating).

Q Which is immediately just forward of the bridge, is that right?

A Yes.

Q Didn't the bosun and the Captain go up to this mast house which is marked with an "A"?

A Yes.

MR. JACOBSEN: Off the record.

(Discussion off the record.)

Q Now, as I understand it, there was one ballast pump and two bilge pumps working after you went down to the Engine Room at 1700 on February 6th, is that right?

A Two bilge and one ballast.

Q Pumps?

A Yes.

Q They were working, in operation?

A Yes.

Q Do you know what the capacity of the ballast pump was, approximately?

A No.

CC-21

Q Have you ever had any deck officer training?

A No.

Q Then you have not had any weather observation training, have you?

A No.

Q Were there any other holds or double bottoms, other than 2 and 3 that were being pumped out after you went in the Engine Room, any time after 1700 on the 6th?

A Pumping out?

Q Yes.

A No.

Q The only pumping was the double bottoms and the holds at No. 2 and 3?

A Yes.

Q Was there any water in the bilges in the Engine Room?

A No.

Q Do you know whether there was any water in the forepeak?

A How could I know?

Q Did the Chief Engineer ever express an opinion as to whether or not there was any sea water in the forepeak?

A I didn't hear him.

Q Did anyone take any soundings of No. 2 or 3, that

CC-22

you know of?

MR. ALLEN: When?

MR. JACOBSEN: At any time on the 6th.

A I don't know.

Q What about the double bottoms at the No. 2 and 3?

A I don't know.

Q Do you know who ascertained that there was water in No. 2 hold and No. 3 hold and No. 2 double bottom and No. 3 double bottom?

A I was only notified.

Q Do you know whether anybody took soundings further aft in Hold No. 4 and double bottoms No. 4, 5 and 6?

A I don't know.

Q Did you ever see any of the messages sent by the ship during this voyage across the Pacific, indicating position, fuel consumption and data like that?

A No. This is a job for the Captain, Ready Officer and the Chief Engineer.

Q As you said before, the fuel consumption would be figured out by the Chief Engineer, is that right?

A Yes.

MR. JACOBSEN: No further questions.

REDIRECT EXAMINATION BY MR. ALLEN:

Q Is it possible to determine if there is water in

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the cargo holds by pumping the bilges from each hold and seeing if you get water?

A Yes. There are gauges.

Q Is the answer yes, you can tell by pumping?

A Yes.

Q At any time during this trip before the storm, was it necessary to pump the bilges of the double bottoms in [illegible] of the cargo spaces?

A No.

Q Did the Chief or the Second Engineer stand regular watches?

A No.

Q At what times were they in the Engine Room?

MR. JACOBSEN: When?

MR. ALLEN: On a regular daily basis.

A The Second Engineer should be in the Engine Room from 8:00 o'clock in the morning until 5:00 o'clock in the afternoon, and if he's needed you tell him that he's needed, and he goes too.

Q How about the Chief?

A He goes down at various times. He's making inspections in the morning and in the afternoon, and if there is a problem, then he stays all the time.

Q How far away are the quarters of the Chief and the

CC-47

Second Engineer from the Engine Room?

A Four platforms.

Q Do you mean four levels straight up and down?

A I mean platforms. There are ladders.

Q Do they both sleep in the after end of the ship?

A Yes.

Q Now, where did you leave the Atlantic Hero?

A In China.

Q When did you leave?

A On February 25, '75.

Q How did you go from there?

A By air.

Q No train trip?

A No. I took a train to the airport.

Q What time did you get to New York?

A 10:30 P.M. last night.

Q You came into the office today?

A Yes.

MR. ALLEN: That's all.

RECROSS EXAMINATION BY MR. JACOBSEN:

Q Were your sleeping quarters aft on the Antonios Demades?

A Yes. All the engineers' quarters.

MR. JACOBSEN: That is all.

CC-20

J 554a

Exhibit EE

(Drafts at Canal Zone)

LAW OFFICES OF
CICHANOWICZ & CALLAN
80 BROAD STREET
NEW YORK, N. Y. 10004

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MICHAEL L. CORBETT
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GEORGE T. DELANEY
MARY T. DERMODY
PAUL M JONES
NICHOLAS D. MILANO

March 13, 1975

EX. EE

Messrs. Bigham, Englar, Jones & Houston
99 John Street
New York, N.Y. 10038

Attention: Douglas A. Jacobsen, Esq.

Re: M/V ANTONIOS DEMADES
YAWATA IRON & STEEL CO. LTD.
v.
ANTHONY SHIPPING CO.
Docket No. 71 Civ. 456 JEL
Our File: 40-293 DBA

Dear Sirs:

We enclose photocopy of the Panama Canal Company report, which we have marked as Exhibit EE. The original is in our possession and will be submitted to the Court with the other exhibits.

Very truly yours,

CICHANOWICZ & CALLAN

By Donald B. Allen

DBA:hep
Enclosure

cc: Honorable J. Edward Lumbard
United States District Court
U. S. Courthouse
Foley Square
New York, N.Y. 10007

EE-1

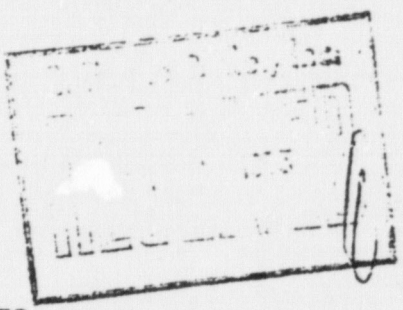
J 555a

Exhibit EE

PANAMA CANAL COMPANY
CANAL ZONE
CAPTAIN OF THE PORT

IN REPLY REFER TO:
MRPC

Box 5002
Cristobal, Canal Zone
March 6, 1975



C. Fernie & Company, Inc.
Box 2042
Cristobal, Canal Zone

Dear Sirs:

M. S. ANTONIOS DEMADES
At the Panama Canal on January 13/14, 1970

Subject to your telephone conversation, Panama Canal records indicate that the subject vessel shifted from Pier 9 AB to the anchorage to await transit on January 14, 1970. The recorded draft of the vessel at time of shifting was 35 feet 06 inches, forward, and 37 feet 00 inches, aft.

This is to confirm that there are no other recorded drafts of this vessel during transit.

Very truly yours,

C. W. Lewis
Port Captain, Cristobal

CWL:mal

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CICHANOWICZ & CALLAN
OCT 16 1975
COPY RECEIVED